

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT				1. CONTRACT ID CODE		PAGE OF PAGES	
2. AMENDMENT/MODIFICATION NO.		3. EFFECTIVE DATE		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. <i>(If applicable)</i>	
6. ISSUED BY		CODE		7. ADMINISTERED BY <i>(If other than Item 6)</i>		CODE	
8. NAME AND ADDRESS OF CONTRACTOR <i>(No., street, county, State and ZIP Code)</i>				(X)		9A. AMENDMENT OF SOLICIATION NO.	
						9B. DATED <i>(SEE ITEM 11)</i>	
						10A. MODIFICATION OF CONTRACT/ORDER NO.	
						10B. DATED <i>(SEE ITEM 11)</i>	
CODE		FACILITY CODE					

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers
☐ is extended, ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. **FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER.** If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

**13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS.
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

CHECK ONE	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: <i>(Specify authority)</i> THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES <i>(such as changes in paying office, appropriation date, etc.)</i> SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER <i>(Specify type of modification and authority)</i>

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return _____ copy to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER <i>(Type or print)</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>	
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
_____ <i>(Signature of person authorized to sign)</i>		_____ <i>(Signature of Contracting Officer)</i>	

Item 14. Continued.

CHANGES TO VOLUME II – DESIGN AND PERFORMANCE REQUIREMENTS

1. Replacement Chapters.- Replace the following chapters with the accompanying new chapters of the same number and title, each bearing the notation "ACCOMPANYING AMENDMENT NO. 0008 TO SOLICITATION NO. DACA63-02-R-0007:"

CHAPTER C24 - ACCESSORY FIXTURES
CHAPTER D5 - ELECTRICAL POWER
CHAPTER D51 - ELECTRICAL ENERGY GENERATION
CHAPTER D52 - SERVICE AND DISTRIBUTION
CHAPTER D53 - BRANCH CIRCUITS
CHAPTER D7 - TELECOMMUNICATIONS
CHAPTER D73 - TELEVISION
CHAPTER D92 - SECURITY CONTROLS

CHANGES TO VOLUME IV – ATTACHMENTS

2. Replacement Attachments.- Replace the following attachments with the accompanying new attachments of the same number and title, each bearing the notation "ACCOMPANYING AMENDMENT NO. 0008 TO SOLICITATION NO. DACA63-02-R-0007."

ATTACHMENT A - SPACE BUBBLE DIAGRAM
ATTACHMENT C - ROOM FUNCTIONAL REQUIREMENTS

The changes to Attachment C affect the following pages:

C2-3 - Classrooms
E4 - Telecommunications Room
E9 - Testing & Observation
E15-17 - Classrooms
E18 - Satellite Class
E19 - Classroom
E20 - Lecture Hall
E37 - Director's Office
G25-28 - Classrooms
G29-30 - Computer Lab
L15 - Telecommunications Closet
M1 - Office
M4 - PLATO Computer Lab

3. Attachment K Drawings: Replace the following drawing bearing the notation "AM_0008":

e01.cal E1 ELECTRICAL SITE PLAN 1

END OF AMENDMENT

CHAPTER C24**ACCESSORY FIXTURES****PERFORMANCE****A. Basic Function:**

1. Provide accessory fixtures as required to accomplish the design as required by code and as indicated in the project program.
 - a. Mirrors:
 - 1) One for each lavatory, unless otherwise indicated.
 - b. Grab Bars: Wherever required for safety and assistance in use of toilet and bath fixtures, and at toilets designed for the disabled, showers, and bathtubs.
 - c. Waste receptacles.
 - 1) One for each two toilets in women's restrooms, for sanitary napkin disposal.
 - 2) One in each classroom.
 - d. Baby Changing Station: One in each public restroom.
 - e. Electric Hand/Hair Dryers: One for every 3 lavatories or less in a group.
 - f. Holders and dispensers for toilet, sink, and bath supplies. **(AM#0008)**
 - 1) Toilet Paper: Roll, consumer-size; one dispenser per toilet and bidet.
 - 2) Towels: Paper, in rolls; one dispenser per 3 lavatories.
 - 3) Towel bars or hooks, in each bathroom, to hold 2 unfolded items to dry, 6 folded items, and 2 hooks.
 - 4) Toilet Seat Covers: Paper; one dispenser per toilet.
 - 5) Hand Soap: Liquid, one dispenser for each lavatory.
 - g. Postal Fixtures: As specified in USPS Handbook AS-503-2000 and other USPS standards referenced therein.
 - h. Telecommunications Fixtures: Fixed mountings and enclosures for sound communications equipment and supplies.
 - 1) Public telephones.
 - 2) Telephone instruments and equipment by others.
 - a) Enclosures:
 - (1) Minimum Enclosure: For all public telephones, provide an enclosure consisting of side panels extending approximately 12 inches (305 mm), with a shelf below the telephone; unless otherwise indicated.
 - 3) Visual Display Fixtures: Configuration and surface area as indicated in the program.
 - a) Tackable surfaces, which are identified in the program as tackboards, for standard push pin use.
 - (1) Classrooms: 32 sq ft (3 sq m), minimum, usable area.
 - (2) Where indicated as "secured" and in lobbies and corridors, prevent removal of applied items while allowing full visibility.
 - (3) Tackable surface area must be calculated separately from other display surface types.
 - b) Projection surfaces, which are identified in the program as projection screens.
 - (1) Classrooms: For viewers in movable seating viewing wide screen cinema, with projector in appropriate location.
 - c) Tackless paper holders.
 - (1) Classrooms: Continuous horizontal holder, or rail-mounted individual, horizontally adjustable holders located at maximum 12 inch (305 mm) intervals, at 72 inches (1830 mm) above floor, on each wall.
2. Where accessory fixtures also must function as elements defined within another element group, meet the requirements of both element groups.
3. In addition to the requirements of this chapter, comply with all applicable requirements of Chapter

111 - Facility Performance, Chapter C - Interiors, and Chapter C2 - Interior Fixtures.

B. Health and Safety:

1. Fire Retardance:
 - a. Projection Surfaces: Free-hanging and tensioned fabric screens flame retardant in accordance with code.
2. Slip Resistance:
3. Broken Glass Hazard: Provide only fully tempered float glass for glass in fixtures.
4. Physical Security of Users of Postal and Telecommunications Fixtures: Fixtures and environs designed and located so as to minimize theft and attacks on users, using principles specified in Chapter 111, and to create obvious impression of safety.

C. Structure:

1. Grab Bars: Strength, design, anchorage, and support as required to withstand 250 pounds-force (1112 N) applied vertically at the center between supports and 250 pounds-force (1112 N) tension applied at any support; supports of sufficient rigidity to prevent rotation of bars under load.

D. Durability:

1. Service Life Span:
2. Outdoor Units: Finish and materials complying with specified requirements for exterior enclosure specified in Chapter B; leakproof enclosures, for protection of contents.
3. Indoor Units: Materials and finish complying with specified requirements for equivalent environments specified in Chapter C /
4. Wear Resistance:
 - a. Visual Display Surfaces: Comply with requirements of Chapter C16 for wall finishes for the building spaces in which installed, as a minimum.
 - b. Erasable Surfaces: Designed to withstand marking with the specified materials without permanent damage, imprint, or visibility of erased markings.
 - c. Tackable Surfaces: Tackable material and surface finish durability not less than would be provided by applied wall coverings complying with ASTM F 793-1993 (R98) Category II-Decorative with Medium Serviceability.
 - d. Projection Surfaces: Fragile surfaces protected from accidental damage by providing covering or concealment when not in use.

END OF CHAPTER C24

CHAPTER D5**ELECTRICAL POWER****PERFORMANCE****A. Basic Function:**

1. Provide electrical power with the appropriate characteristics to operate all electrically operated devices, including those in other services.
2. The electrical system comprises the following elements:
 - a. Electrical Energy Generation (D51): Uninterruptible power supply systems.
 - b. Primary Distribution (D51): Primary aerial to underground transition pole, underground primary feeders, manholes, and other elements required to get power from an existing primary system to service transformer. In addition to the requirements of this chapter, comply with IEEE C2, National Electrical Safety Code.
 - c. Service and Distribution (D52): Service entrance equipment, distribution equipment, transformers, motor control equipment, service and feeder wiring (conductors and raceways), monitoring, safety and control equipment, and other elements required for a complete functional system.
 - d. Branch Circuits (D53): Branch circuit wiring and receptacles and other branch circuit wiring systems.
3. Utility Revenue Meters: Meter incoming electrical service on the low-voltage side of the service transformer (secondary metering) for the building with a single meter.
4. Where electrical power elements also must function as elements defined within another element group, meet the requirements of both element groups.
5. In addition to the requirements of this chapter, comply with all applicable requirements of Chapter 111 - Facility Performance, Chapter G34 - Electrical Power, and Chapter D - Services.
6. Substantiation:
 - a. Construction: Continuity test of wiring systems prior to functional performance test. Functional performance test of wiring systems.

B. Amenity and Comfort:

1. Convenience:
 - a. Locate a watt-hour demand meter in a single location on the exterior side of the service transformer.
 - b. Provide rough-in for future means of reading demand meters from a remote location through telephone lines.

C. Health and Safety:

1. Electrical Hazards: Design in accordance with all NFPA standards that apply to the occupancy, application, and design.
 - a. Control access to spaces housing electrical components (except ADLP classrooms) and allow access only by personnel with a door lock key.
 - b. Provide **(Am#0008) panelboards in ADLP classrooms with lockable doors.**
 - c. Provide electrical distribution equipment in dedicated areas only unless directed otherwise. Electrical distribution equipment shall not be placed in the mechanical room(s).
2. Emergency Systems: Provide an uninterruptible power supply when normal power is interrupted for the following:
 - a. Systems and areas as required by code.
 - b. Specified computers and all telecommunications equipment. See Chapter D51 for

requirements.

D. Durability:

1. Moisture Resistance: Water-resistant equipment includes transformers.
2. Enclosures: As required to protect equipment from environment in which it is installed, complying with NEMA 250-1997 and as follows, as a minimum:
 - a. Exterior, Exposed to Weather and Wind: Type 3S.
 - b. Exterior, Other Locations: Type 3R.
 - c. Interior: Type 1..

E. Operation and Maintenance:

1. Capacity: Calculated in accordance with NFPA 70-2002.
2. Power Consumption and Efficiency:
 - a. Comply with requirements of IEEE Standard 739-1995.
 - b. Comply with requirements of ASHRAE 90.1-1999.
 - c. Metering: Provide meter to measure power consumption of the entire facility.
3. Load Characteristics:
 - a. Maximum Harmonic Current Distortion: Plus or minus 2 percent of design current.
 - b. Transient Suppression: Limit voltage transients by providing transient voltage surge suppression (TVSS) for all branch circuits feeding computers (proposer shall assume all offices and admin areas will have computers), fire alarm panel, and telecommunications equipment. Surge suppressors shall meet the requirements of IEEE C62.41 and be UL listed and labeled as having been tested in accordance with UL 1449. Surge suppressor ratings shall be 120/208 volts rms, operating voltage; 60 Hz; 3-phase; 4 wire with ground; surge current rating of 200kA per phase (line to neutral); and maximum clamping voltage of 1000 volts. Suppression topology shall be a hybrid platform consisting of both Silicon Avalanche Diodes (SAD) and Metal Oxide Varistors (MOV). Fuses shall not be used as surge suppression. A 100A circuit breaker shall be used between TVSS and panelboard. If TVSS is not integral with panelboard, the largest conductor size that a 100A circuit breaker can accommodate shall be used to connect the TVSS to the panelboard. The use of panelboards with integral TVSS is preferred.
4. Protection Against Disturbances:
 - a. Surge Protection. Provide transient voltage surge suppression for the following:
 - 1) Receptacles serving personal computer terminals.
 - 2) Receptacles serving telecommunication equipment.
 - 3) Power supply to fire alarm panel.
 - 4) Substantiation:
 - a) Preliminary Design: Identification of circuits that require surge protection.
 - b) Design Development: Description of surge protection devices to be used.
5. General Receptacle System Voltage: 120/208 volts/3-phase/60 Hz.
 - a. Provide 120 volt/1-phase/60 Hz electrical power for general purpose receptacles.
6. Equipment Voltage: 480 volts/3-phase/60 Hz.
 - a. Equipment Voltage: Provide 480 volt/3-phase/60 Hz electrical power to the following equipment:
 - 1) All motors 5 HP (4 kw) and larger. This voltage may be provided for smaller motors if designer so chooses.
7. Voltage Regulation: Within 3 percent of design voltage at all branch loads.
8. Ease of Use:
 - a. Configuration: Design wiring and protective devices so that outages caused by local

- overloads do not affect unrelated areas or systems.
- b. Main Switchboard: Provide only one located in the main first floor dedicated electrical room.
 - c. Branch-Circuit Panelboards:
 - 1) Provide dedicated panelboards for sensitive electronic equipment, computers, fire alarm panel, and telecommunications equipment.
 - d. Motor Control: Contractor may provide motor control centers for serving equipment that requires more control than simple ON-OFF operation. Provide motors with the appropriate protective, control, and indicating devices.
 - e. Monitoring: Provide local monitoring of the following:
 - 1) Switchboard Monitoring (if switchboard is utilized):
 - a) Power Analysis Values:
 - (1) Output voltage of each phase; phase-to-phase and phase-to-neutral.
 - (2) Output current; each phase and ground.
9. Voltage Regulation: Within 3 percent of design voltage at all branch receptacles.
10. Availability: Provide an electrical system which is available to deliver power 100 percent of the time, under normal operating conditions.
11. Allowance for Change and Expansion:
 - a. Spare Capacity - System Wide:
 - 1) Load: 20 percent, minimum.
 - 2) Rated Capacity: 20 percent, minimum.
 - 3) Number of Additional Circuits: 20 percent, minimum including a minimum of six 20A., single pole circuit breakers per panelboard labeled as "spare".
12. Operating Expense: Minimize operating expenses by providing power factor correction, if cost effective.
 - a. Evaluation of Cost Effectiveness: Simple payback is less than 5 years.
 - 1) Provide a calculation of simple payback based upon utility rate structure, demand charges, capital expense, and energy management.
13. Primary distribution: Provide concrete encased ducts (4 inch (103 mm) thin-walled PVC conduit) and manhole system for underground primary service. Ducts shall be buried a minimum of 18 inches (450 mm) below finished grade. In addition, provide a spare duct with pull wire.
 - a. Electrical manholes. Strength of manholes and their frames and covers shall be designed for H20 wheel load and shall conform to the requirements of IEEE C2. Precast-concrete manholes shall have the required strength established by ASTM C 478, ASTM C 478M. Frames and covers shall be made of gray cast iron and a machine-finished seat shall be provided to ensure a matching joint between frame and cover. Cast iron shall comply with ASTM A 48, Class 30B, minimum. Minimum interior dimensions of manholes shall be 1.8m (length) x 1.2m (width) x 1.8m (height). Manholes shall be provided with a 5/8 inch (15.9mm) x 10 feet (3.1m) ground rod, a sump, pulling irons, and cable racks along both long walls (spaced 600mm apart on center) with a minimum of eight (8) hooks containing porcelain insulators per rack. Manhole cover shall be labeled "ELECTRIC".

PRODUCTS

A. Do not use:

- 1. Direct Buried Cable.
- 2. Primary conductors smaller than #2 AWG.

END OF CHAPTER D5

CHAPTER D51**ELECTRICAL ENERGY GENERATION****PERFORMANCE****A. Basic Function:**

1. Provide an uninterruptible power supply system. The UPS system shall consist of UPS module, battery system, battery protective device, system cabinet, static bypass transfer switch, controls and monitoring. Input ac power shall be connected to the normal source ac input of the UPS module. The battery shall be connected to the dc input of the UPS module through the battery protective device. The ac output of the UPS system shall be connected to the critical loads.
 - a. Provide uninterruptible power supply (UPS) system for the following:
 - 1) Telecommunication System: Transfertime of 0.0167 seconds (1 cycle).
 - a) Duration of 15 minutes.
 - 2) ADLP classrooms and computer labs: Transfertime of 0.0167 seconds (1 cycle).
 - a) Duration of 15 minutes.
 - b. Provide single jack telecommunication outlet adjacent to UPS to allow remote monitoring of unit.
2. UPS Capacity:
 - a. Provide capacity at least 20 percent more than the connected load. Assume telecommunications system connected load will be twice the connected load of the equipment being provided by the contractor.
 - b. Provide UPS that is able to accommodate a minimum crest factor of 3.
3. Where electrical energy generation elements must also function as elements defined within another element group, meet the requirements of both groups.
4. In addition to the requirements of this chapter, comply with all applicable requirements of Chapter 111 - Facility Performance, Chapter D - Services, and Chapter D5 - Electrical.

B. Amenity and Comfort:

1. Sound and Noise:
 - a. Provide uninterruptible power supply systems noise generation of no more than 69 dBA measured at 5 feet (1.5 m) when measured at full load on the A scale of a standard sound level meter at slow response.

C. Health and Safety:

1. Protection from Breakage: Locate electrical UPS within a dedicated electrical room.
2. Accidental Explosion: Ventilate room containing UPS to prevent the build-up of explosive gases.
3. Electrical Shock: Protect personnel from exposure to live power leads.
4. Intrusion: Protect UPS from unauthorized access.

D. Structural:

1. Seismic Design:
 - a. Provide UPS designed for use in seismic zone 1.

E. Durability:

1. Cabinet: UPS system shall be installed in cabinets of heavy-duty structure meeting the NEMA PE 1 standards for floor mounting.
2. Expected Service Life Span: Provide UPS systems which will last a minimum of 10 years in

service without major repairs or operating expense.

F. Operation and Maintenance:

1. Uninterruptible Power Supply (UPS) Configuration: Non-redundant with automatic transfer from UPS power to normal power.
 - a. UPS Capacity: Connected load plus 20 percent spare.
 - b. Substantiation:
 - 1) Design Development: Single-line drawings, power supply equipment sizes and types, equipment room sizes.
 - 2) Construction Documents: Riser diagrams, calculations, equipment operating parameters.
2. Uninterruptible Power Supply Systems:
 - a. Current Distortion: Less than 10 percent total harmonic distortion without filter.
 - b. Overload Rating, Percent of Full Load For Any Combination of Linear and Non-Linear Loads:
 - 1) 100 percent continuously.
 - 2) 125 percent for 10 minutes.
 - 3) 150 percent for 30 seconds.
 - c. Harmonic Content of Output Waveform:
 - 1) Maximum 4 percent RMS for nonlinear load.
 - 2) Maximum 2 percent RMS for any linear load.
 - d. Functions:
 - 1) Emergency power off.
 - 2) Input isolation transformer.
 - 3) Maintenance bypass cabinet
 - 4) Maintenance bypass transformer.
 - 5) SNMP communications capability. Provide **(Am #0008) a RJ45 Ethernet SNMP port for communication to network.**
 - 6) Alarm status contacts.
 - 7) Static bypass transfer switch.
 - e. Input Surges: The UPS system shall sustain input surges without damage in accordance with IEEE C62.41.
 - f. Battery sizing: Capacity determination shall be made in accordance with the "performance test" guidelines of IEEE Std 450..
 - g. Reliability: 100 percent.

PRODUCTS

A. UPS Batteries:

1. Use the following:
 - a. Valve-regulated lead-acid.
 - b. Lead-acid (flooded cell).
2. Do not use:
 - a. Lead-antimony (flooded cell).
 - b. Nickel-cadmium.

END OF CHAPTER D51

CHAPTER D52**SERVICE AND DISTRIBUTION****PERFORMANCE****A. Basic Function:**

1. Distribute electric power for equipment circuits, lighting circuits, receptacle circuits, and electrical utilization devices.
2. Main Electrical Service: Provide the service transformer to convert the utility distribution voltage to the building's utilization voltage. The Owner will maintain the service transformer. See attached site plan for location of existing utility power lines. Exact connection point to utility line shall be coordinated with the Ft. Polk exterior electrical shop (tel no. 337-531-2303). Depending on contractor's design, some relocation or removal of aerial power lines may be required. Removal/relocation shall be coordinated with Ft. Polk exterior electrical shop. Exterior portion of service shall comply with NFPA 70, National Electrical Code and IEEE C2, National Electrical Safety Code, in addition to the requirements of this chapter.
3. Distribution Circuit Configuration: Underground radial circuit arrangement.
4. Panelboard Locations: Locate panelboards in dedicated electrical rooms/closets only except panelboards supplying power to computers and video teleconferencing equipment in ADLP classrooms shall be located within the classroom (one panelboard per room). Do not locate panelboards in public corridors, hallways, or stairwells.
 - a. Panelboards serving computer, video teleconferencing equipment, and telecommunication loads shall have no other load types connected to said panelboard.
5. Where service and distribution elements must also function as elements defined within another elements group, meet requirements of both groups.
6. In addition to the requirements of this chapter, comply with all applicable requirements of Chapter 111 - Facility Performance, Chapter D - Services, and Chapter D5 - Electrical.

B. Amenity and Comfort:

1. Sound and Noise:
 - a. Do not locate dry-type transformers near sound sensitive areas. See Chapter C for interior space sound level requirements.
 - b. Provide transformers with noise generation 3 dBA less than the sound levels listed in IEEE Standard 241-1990 (R1997).
2. Appearance:
 - a. Location of Service Transformer: Outside the building a minimum of **(Am #0008) 33 feet (10 m)** from facility.
 - b. Do not locate switchboards and transformers in corridors, hallways, lobbies, public spaces, or stairwells. Switchboards and transformers will be provided in dedicated electrical rooms/closets only.
 - c. Conceal electrical conduit in walls and behind ceilings in the occupied spaces. Exposed conduit is only allowed in mechanical, electrical, and telecommunications rooms..

C. Health and Safety:

1. Protection from Breakage: Locate service and distribution equipment in electrical rooms.
2. Intrusion: Protect electrical distribution equipment from unauthorized access.

D. Structural:

1. Seismic Design: Provide service and distribution elements with the ability to move where

differential movement is anticipated.

E. Durability:

1. Impact Resistance: Provide service and distribution equipment with heavy gage metal housing.
2. Transformer Insulation Class: As follows:
 - a. Service Transformers: Insulation Class 220 deg C.
 - b. General-Purpose Dry-Type Transformers: Insulation Class 220 (except 185 for 10 kva or less) deg C.

F. Operation and Maintenance:

1. Capacity:
 - a. Service Transformers: As required to serve demand load which includes 20 percent spare capacity..
 - 1) Kilovoltampere (kVA) Rating: Provide transformers with preferred ratings according to IEEE C57.12.00-2000.
 - 2) Primary Voltage: As required..
 - 3) Secondary Voltage: 480Y/277 V.
 - 4) Connection Method: Delta-Wye connection.
 - b. Main Switchboards: As required to serve demand load which includes 20 percent spare capacity..
 - c. Interior Distribution Transformers: As required to serve demand load which includes 20 percent spare capacity..
 - d. Branch Circuit Panelboards: As required to serve demand load which includes 20 percent spare capacity..
 - e. Substantiation:
 - 1) Design Development: Single-line diagram, showing feeder and equipment sizes; required electrical room sizes.
 - 2) Construction Documents: Riser diagram and calculations.
 - 3) Construction: Equipment characteristics.
 - 4) Closeout: For each panelboard, balance current on each phase conductor within 10 percent.
2. Ease of Use:
 - a. Main busway. Provide main busway centrally located to minimize length of feeder and branch circuit runs.
 - b. Labeling. All circuit breakers within a switchboard shall be labeled to identify load served. All panelboards shall be provided with a directory and each circuit listed in the directory shall be labeled to identify load served.
3. Dry-Type Transformer Applications:
 - a. Distribution Transformers for Linear Loads: Use general purpose, energy-saving in accordance with NEMA Standard TP1.
 - b. Distribution Transformers for Nonlinear Loads. Same requirements as for linear loads except include a neutral insertion filter to reduce harmonics..
 - 1) Neutral Insertion Filters. Neutral insertion filters shall be a series connected, bi-directional, passive device. Filter shall modify the input current waveform at single phase loads, provide an increase in load power factor, decrease branch and feeder neutral current and reduce rms phase currents compared to non-filtered circuitry. The filter shall modify the input current wave forms required by single-phase switch mode power supplies and other non-linear loads in order to reduce the 3rd harmonic currents demanded by such loads. The resultant reduction in 3rd harmonic current should create a significant decrease in current carried by the neutral conductor of a three-phase four-wire distribution system. Reduction in harmonics shall be bi-directional, occurring on both the line and load side of the device, and shall be

realized even when measured at the loads. Filter shall be totally passive in operation and shall contain no components that operate by switching or actively modifying the voltage or current waveform. Filters shall be rated 120/208 volts, 60Hz. Operating temperature shall be 0 to 40 degrees C. Information on these filters can be obtained from Harmonics Limited, 731 Main St., Monroe, CT 06468, (877) 437-3688.

- c. Distribution Transformers for Linear and Nonlinear Loads: Same requirements as for nonlinear loads.
- 4. Ease of Maintenance and Repair:
 - a. Select equipment which is segmented into modules to ease replacement of component failures.
 - b. Wherever equipment is located in cabinets or enclosures, provide doors or removable panels sized to allow easy removal and replacement.

PRODUCTS

A. Transformers:

- 1. Use the following:
 - a. Dry type (for all 120/208 V. loads) Transformers shall comply with NEMA ST 20, and UL 506 (if applicable).
 - b. Liquid filled (exterior only) pad-mounted type (for 277/480 V. loads). Transformers shall comply with IEEE ANSI/IEEE C57.12.00, and ANSI C57.12.26.
 - c. Deleted. (Am#1)
- 2. Do not use:
 - a. Air type.
 - b. Cast-coil.
 - c. Oil type.
 - d. Deleted. (Am#5)
 - e. Gas type.
 - f. Substation.
 - g. Primary-unit substation.
 - h. Secondary-unit substation.
 - i. Network.
 - j. Indoor distribution.

B. Secondary Service and Distribution Feeders:

- 1. Conduits:
 - a. Use the following:
 - 1) Below Grade: PVC conduit (thick-walled).
 - 2) Exterior, Exposed: GRS conduit.
 - 3) Interior, Exposed: IMC conduit, GRS conduit, or EMT.
 - 4) Interior, Concealed: IMC conduit, GRS conduit, or EMT.
 - b. Do not use:
 - 1) Below Grade: IMC conduit, GRS conduit, or EMT.
 - 2) Exterior, Exposed: IMC conduit, PVC conduit, or EMT.
- 2. Conductors:
 - a. Use the following (this also applies to branch circuit conductors):
 - 1) Deleted. (Am#5)
 - 2) Deleted. (Am#5)
 - 3) Stranded for #8 AWG and larger.
 - 4) Solid for #10 AWG and smaller.
 - b. Do not use:
 - 1) Aluminum. (Am#5)

C. Main Service Equipment: In accordance with UL 869A.

1. Types of Equipment:
 - a. Use any of the following:
 - 1) Switchboards. Switchboards shall comply with NEMA PB 2, and UL 891.
 - 2) Distribution panels. Panels shall be dead-front construction and comply with NEMA PB 1 and UL 67.
 - b. Do not use:
 - 1) Low voltage switchgear.
 - 2) Motor control centers.
2. Main Devices:
 - a. Use one of the following:
 - 1) Molded case circuit breakers.
 - b. Do not use:
 - 1) Power circuit breakers.
 - 2) Fused switches.
 - 3) Bolted pressure switch.
3. Branch Devices:
 - a. Use the following:
 - 1) Circuit breakers.
 - b. Do not use:
 - 1) Fused switches.
4. Busbars:
 - a. Use the following:
 - 1) Copper.
 - b. Do not use:
 - 1) Plated aluminum.

D. Branch Circuit Panelboards: Panelboards shall be dead-front construction and comply with NEMA PB 1 and UL 67.

1. Busbars:
 - a. Use the following:
 - 1) Copper.
 - b. Do not use:
 - 1) Plated aluminum.
2. Circuit Breakers:
 - a. Use the following:
 - 1) Molded case circuit breakers.
 - b. Do not use:
 - 1) Fused switches.

E. Motor Control Centers: MCC's shall conform to the requirements of NEMA ICS 1, NEMA ICS 2, NEMA ICS 3, NEMA ICS 6, UL 508, and UL 845.

1. Busbars:
 - a. Use the following:
 - 1) Copper.
 - b. Do not use:
 - 1) Plated aluminum.
2. Overcurrent Protectors:
 - a. Use one of the following:
 - 1) Circuit breakers.

- 2) Fused switches.
- 3) Motor circuit protector (MCP).

END OF CHAPTER D52

CHAPTER D53**BRANCH CIRCUITS****PERFORMANCE****A. Basic Function:**

1. Power: Provide adequate electrical power and safe and efficient distribution from panelboards or switchboards to the locations where it is needed, based on the project program, other requirements in Volumes A through G, and as follows:
2. Branch circuits comprise the following elements:
 - a. Branch circuit breakers.
 - b. Conductors and cable from panelboards to fixtures, wiring devices, and mechanical equipment. All branch circuits shall be provided with a separate grounding conductor.
 - c. Raceways and boxes.
 - d. Wiring devices, including, but not limited to, receptacles, floor boxes and plates, wall switches, wall dimmers, remote control switching devices, and wall plates; and all equipment requiring electrical power.
3. Where branch circuits are integral with elements defined within another element group, meet requirements of both element groups.
4. In addition to the requirements of this chapter, comply with all applicable requirements of Chapter 111 - Facility Performance, Chapter D - Services, and Chapter D5 - Electrical Power.

B. Amenity and Comfort:

1. Accessibility: Comply with ADA Accessibility Guidelines and the following:
 - a. Unless otherwise indicated flush wall mount all telecommunication outlets and power receptacles 18 inches (450 mm) above finished floor. Surface mounting is allowed in electrical and mechanical rooms.
2. Convenience:
 - a. Provide as a minimum convenience duplex receptacles as stated in the attached room requirements sheets. feet (m)
 - b. Provide duplex receptacles in all corridors for operation of custodial equipment, and on the exterior of the facility adjacent to all means of egress. feet (m)
 - c. Provide a duplex receptacle adjacent to all dual jack telecommunication outlets.

C. Health and Safety:

1. Tested Materials:
 - a. Provide branch circuit elements in compliance with code and that are UL listed or labeled..
 - b. Provide elements that have their flame spread and smoke developed ratings printed on them.

D. Operations and Maintenance:

1. Capacity: Provide branch circuit wiring with sufficient capacity as required by code. Minimum conductor size allowed is #12 AWG copper.
2. **(Am #0008) Size: Conductors for branch circuits of 120 volts more than 100 feet (30 m) long and of 277 volts more than 230 feet (70 m) long, from panel to load center, shall be no smaller than No. 10 AWG.**
3. Dedicated Circuits: In addition to other requirements dedicated circuits shall be provided for the following.
 - a. Each electric water cooler/drinking fountain.
 - b. General purpose duplex receptacles located in corridors. More than one may be required.
 - c. Fire alarm control panel.

- d. Public address system power supplies.
 - e. Exterior duplex receptacles. More than one may be required.
 - f. Duplex receptacle in copier rooms.
 - g. Power conditioner in mechanical room for master direct digital control panel.
 - h. Receptacle inside master direct digital control panel.
 - i. Anti-theft system in main library.
 - j. General purpose duplex receptacles in mechanical room(s).
 - k. Receptacles for vending machines.
4. Motor voltage: All motors 1/2 HP (0.375 kw) and larger shall be 3-phase.
 5. Quantity Limitation.
 - a. No more than six general purpose (convenience) receptacles shall be connected to any one branch circuit.
 - b. No more than three duplex receptacles designated for computers shall be connected to any one branch circuit.
 6. Power Consumption and Efficiency: See requirements in Chapter D5 - Electrical.

PRODUCTS

A. Branch Circuit Wiring:

1. Use the following:
 - a. Concealed raceways except exposed is allowed in electrical, mechanical, and telecommunication rooms.
2. Do not use the following:
 - a. Surface mounted raceway except they allowed in electrical, mechanical, and telecommunication rooms.
 - b. Multiple outlet assemblies.

B. Single, Duplex, and Quadraplex Receptacles:

1. Use the following:
 - a. 125V., NEMA type 5-20R.
2. Do not use the following:
 - a. 125V., NEMA type 5-15R.

C. Receptacle Cover Plates:

1. Use any of the following:
 - a. Material and Finish: Plastic, off-white.
 - b. Material and Finish: Plastic, beige.
 - c. Material and Finish: Metal, chrome plated.
 - d. Material and Finish: Stainless steel, brushed.
2. Do not use the following:
 - a. Material and Finish: Wood, natural grain.

END OF CHAPTER D53

CHAPTER D7**TELECOMMUNICATIONS****PERFORMANCE****A. Basic Function:**

1. Provide the following telecommunication services:
 - a. Voice and Data (D71): Infrastructure for voice and data transmission.
 - b. Sound Reinforcement (D72): Public address system in library.
 - c. Television (D73): Television (CATV & Satellite) cabinet, cabling, and outlets.
2. Where telecommunications elements also must function as elements defined within another element group, meet the requirements of both element groups.
3. In addition to the requirements of this chapter, comply with all applicable requirements of Chapter 111 - Facility Performance, Chapter D - Services, and Chapter G3 - Site Services.

B. Health and Safety:

1. Electrical Hazards: Design in accordance with all NFPA standards that apply to the occupancy, application, and design.
 - a. Control access to spaces housing telecommunication components by providing a lockable door into room.
2. Emergency Systems: Provide a UPS for when normal power is interrupted, for the following:
 - a. Systems and areas as required by code.
 - b. All quadruplex receptacles in telecommunication room(s).

C. Durability:

1. Enclosures: As required to protect equipment from environment in which it is installed, complying with NEMA 250-1997.
 - a. Interior, Other Locations: Type 1.

D. Operation and Maintenance:

1. Capacity: Design systems to deliver required performance while operating within their intended ratings.
2. Power Consumption and Efficiency:
 - a. Comply with requirements for energy efficiency of electrical equipment in ASHRAE 90.1-1999.

PRODUCTS**A. Provide the following:**

1. Telecommunication Room(s). Room(s) shall be located centrally in the area(s) it serves. Room(s) shall be located such that maximum horizontal copper cable distance from the patch panel through the structured cabling system to the furthest outlet does not exceed 300 feet (90 m). A minimum of one room shall be provided per floor.
 - a. Plywood Backboards. Backboards shall be 3/4" (21 mm) thick, 8 feet (2440 mm) tall and shall completely cover as a minimum the width of two walls within each telecommunication room. Backboards shall be finished with a fire resistant coating and rigidly attached to the wall to support all attached equipment.
 - b. Equipment Racks. If a single telecommunication room is provided (allowed only in a single story facility) then sufficient racks shall be installed to accommodate all contractor provided rack mounted equipment, and an additional 3 spare racks shall be installed for equipment to be provided by others. In addition, sufficient space shall be provided to accommodate a 55

inch wide by 43.5 inch deep cabinet for the ADLP classroom servers to be provided and installed by others. If more than one telecommunication room is provided then each room shall be provided with sufficient racks to accommodate all contractor provided rack mounted equipment. In addition, the primary telecommunications room shall be provided with 2 additional spare racks and the secondary rooms shall be provided with one additional spare rack. The room closest to the ADLP classrooms shall also be sized to accommodate the 55 inch by 43.5 inch cabinet mentioned above. Racks shall be floor mounted open frame type, shall be centered in the room as much as possible and shall have a minimum working space of 3 feet (915 mm) on all four sides. Minimum working space also applies to ADLP server cabinet. Adjacent racks may share working space. Racks shall be 19 inches (480 mm) wide and 7 feet (2.1 m) tall. Racks shall be welded steel relay racks with uprights to mount equipment. Uprights shall be 3 inches (75 mm) deep channel, 1-1/4 inches (32 mm) wide, drilled and tapped 12-24 in a 1/2 inch (13 mm) pattern. Racks shall be provided with a standard top crossmember, and predrilled base plate to allow floor fastening. Racks shall be clear coated. A floor surface mounted quadruplex receptacle shall be provided adjacent to the dedicated space allocated for the government installed ADLP server cabinet. Receptacle shall be on a dedicated circuit.

- 1) Cable Guides. Cable guides shall be specifically manufactured for the purpose of routing cables, wires and patch cords horizontally and vertically on equipment racks. Cable guides shall consist of ring or bracket-like devices mounted on rack panels for horizontal use or individually mounted for vertical use. Cable guides shall mount to racks by screws and/or nuts and lockwashers.
- c. Cable Rack. A channel type cable rack shall be provided to provide distribution between the backboards, equipment racks, riser conduits, and the distribution cable tray.
- d. Climate Control. Each room shall be independently climate controlled capable of providing cooling year round (24 hours/day, 365 days/year) to protect all installed electronic equipment. Room(s) shall be provided with positive atmospheric pressure to exclude dust.
- e. Single Jack Outlet. Each room shall be provided a wall outlet for voice mounted near the door at a height of 4 feet (1220 mm).
- f. Grounding. A # 6 AWG bare copper conductor shall be used as a grounding conductor. All grounding conductors listed below shall be connected to the facility's primary grounding electrode system in accordance with EIA/TIA 607. When penetrating walls or floors grounding conductor shall be placed in a 3/4 inch (21 mm) conduit.
 - 1) Plywood Backboard. 10 feet (3000 mm) of the grounding conductor shall be coiled up on plywood backboard.
 - 2) Equipment Racks. All equipment racks shall be grounded.
 - 3) CATV and Satellite cabinets. 3 feet of grounding conductor shall be coiled up inside cabinets.
- g. Fiber Optic Patch Panels. Panel(s) shall be modular with ST connectors. Panel quantity as required per design. Panels shall be a complete system of components by a single manufacturer, and shall provide termination, splice storage, routing, radius limiting, cable fastening, storage, and cross-connection. Patch panels shall be 19 inch (480 mm) rack mounted panels. Patch panels shall provide strain relief for cables. Panels shall be labeled with alphanumeric x-y coordinates. Patch panel connectors and couplers shall be the same type and configuration as used elsewhere in the system.
- h. Copper Patch Panels. Panels shall be Category 5e modular with RJ-45 connectors as required to terminate all twisted pair copper cables within the facility. Panels shall consist of eight-position modular jacks, with rear mounted type 110 insulation displacement connectors, arranged in rows or columns on 19 inch (480 mm) rack mounted panels. Jack pin/pair configuration shall be T568B per ANSI/TIA/EIA-568-A. Jacks shall be unkeyed. Panels shall be labeled with alphanumeric x-y coordinates. The modular jacks shall conform to the requirements of ANSI/TIA/EIA-568-A, and shall be rated for use with Category 5e cable in accordance with ANSI/TIA/EIA-568-A-5 and shall meet the Link Test parameters as listed in TIA/EIA TSB 67 and supplemented by ANSI/TIA/EIA-568-A-5.

- i. Patch Cords.
 - 1) RJ-45, CAT 5e, 5 foot patch cords as required to patch out all RJ-45 connections between hubs (supplied and installed by others) and distribution equipment. Patch cords shall be cable assemblies consisting of flexible, twisted pair stranded wire with eight-position plugs at each end. Cable shall be label-verified. Cable jacket shall be factory marked at regular intervals indicating verifying organization and performance level. Patch cords shall be wired straight through; pin numbers shall be identical at each end and shall be paired to match T568B patch panel jack wiring per ANSI/TIA/EIA-568-A. Patch cords shall be unkeyed. Patch cords shall be factory assembled. Patch cords shall conform to the requirements of ANSI/TIA/EIA-568-A-5 for Category 5e. Cords are contractor provided, user installed.
 - 2) **(Am #0008) ST/SC**, duplex, single mode, 5 foot patch cords as required to patch out all ST connections on patch panels SC connections on equipment (supplied and installed by others). Patch cords shall be cable assemblies consisting of flexible optical fiber cable with connectors of the same type as used elsewhere in the system. Optical fiber shall be the same type as used elsewhere in the system. Patch cords shall be complete assemblies from manufacturer's standard product lines. Cords are contractor provided, user installed.
- j. Terminal Blocks. Provide as required to accommodate 300PR copper cable. Terminal blocks shall be wall mounted wire termination units consisting of insulation displacement connectors mounted in plastic blocks, frames or housings. Blocks shall be type 110 which meet the requirements of ANSI/TIA/EIA-568-A, and shall be rated for use with Category 5e cable in accordance with ANSI/TIA/EIA-568-A-5 and shall meet the Link Test parameters as listed in TIA/EIA TSB 67 and supplemented by ANSI/TIA/EIA-568-A-5. Blocks shall be mounted on standoffs and shall include cable management hardware. Insulation displacement connectors shall terminate 22 or 24 gauge solid copper wire as a minimum, and shall be connected in pairs so that horizontal cable and connected jumper wires are on separate connected terminals. Blocks shall be mounted on plywood backboard.
- k. Fiber Optic (FO) Backbone Cable: 12 strand FO cable as required per design. Single mode fiber optic backbone cable shall meet the requirements of ICEA S-83-596 and the following: operation at a center wavelength of 1310 and 1550 nm; core/cladding diameter 8.3 nominal/125 micrometer; maximum attenuation 2.0 dB/km at 1300 nm and 1.75 dB/km at 1550 nm. Numerical aperture for each fiber shall be a minimum of 0.10. Cable construction shall be tight buffered type. Cable shall be imprinted with fiber count and aggregate length at regular intervals. Individual fibers shall be color coded for identification. Cable shall be rated OFNP per NFPA 70. **(Am #0008) There shall be one communication closet at ground level that will be designated as a Main Communication Room (MCR). All other communication closets shall be designated as Telecommunication Closets (TC). Between the MCR and any TC's a 12 strand single mode cable shall be provided for backbone connections. Each cable shall be terminated in a 19 inch (480 mm) rack with ST connectors.**
- l. Copper Backbone Cable: Backbone cable shall be used for voice only and shall meet the requirements of ICEA S-80-576 and ANSI/TIA/EIA-568-A for **Category 5 (AM#4)** 100-ohm unshielded twisted pair cable. Cable shall be label-verified. Cable jacket shall be factory marked at regular intervals indicating verifying organization and performance level. Conductors shall be solid untinned copper 24 AWG. Cable shall be rated CMP per NFPA 70.
- m. Protector Modules. Contractor shall provide three (3) 100PR protector modules. Modules shall be of the two-element gas tube type. Modules shall be heavy duty, A>10 kA, B>400, C>65A where A is the maximum single impulse discharge current, B is the impulse life and C is the AC discharge current per ANSI C62.61. The gas modules shall shunt high voltage to ground, fail short, be equipped with an external spark gap and heat coils, and shall comply with UL 497. Modules shall be mounted on plywood backboard in primary

telecommunication room.

- 1) Copper Cable. Incoming 300PR cable shall be terminated on protector modules.
 - 2) Fiber Optic Cables. Incoming 12 strand cable shall be terminated on a patch panel.
 - n. Metering Conduit. A 1 inch (27mm) conduit with pull wire between DDC cabinet (cabinet with conduit connection to electrical meter) in mechanical room and plywood backboard in telecommunication room.
 - o. CATV Cabinet. Wall mounted of sufficient size to accomodate all home run coax cables from TV outlets and future headend equipment provided and installed by others. Outside coax cable to terminate in this cabinet. Provide wall mounted quadraplex receptacle next to cabinet.
 - p. Satellite Cabinet. Wall mounted of sufficient size to accomodate all home run coax cables from satellite outlets. Outside coax cable to terminate in this cabinet. Provide wall mounted quadraplex receptacle next to cabinet.
 - q. PA System Equipment. Provide necessary power and interfacing components in telecommunication room closest to library.
2. **(AM#5) Classrooms(ADLP, Satellite, and VTC classrooms are excluded). Classrooms shall be provided with a rough-in to accomodate a future state of the art multi-media instructor's platform. Platform will be interfaced to a networked computer, ceiling mounted projector, ceiling mounted speakers, and will be able to accomodate 3.5 inch floppy disks, compact disks, compact video disks, video cassettes, audio cassettes, 35 mm slides, and a "Smart Board". As a minimum rough-in shall include underfloor conduit with pull wire for all future data cabling (accessible from floor and wall), underfloor conduit with pull wire for speaker wiring (accessible from floor and ceiling), and a dedicated recessed floor mounted duplex receptacle for power.**

END OF CHAPTER D7

CHAPTER D73**TELEVISION****PERFORMANCE****A. Basic Function:**

1. Provide the following:
 - a. Interior cable between:
 - 1) CATV/Satellite outlets throughout the facility and cabinets in telecommunication room(s). Cables shall be installed in raceways consisting of conduit and cable trays. Provide a minimum of **(Am #0008) 5 feet (1525 mm)** slack in cabinet.
 - 2) Cabinets if installed in more than one telecommunication room. **(Am #0008) Conduit between cabinets shall be a minimum size of 4 inches (103 mm).**
 - 3) Exterior wall and cabinet in telecommunication room for future connection to government provided and installed satellite dishes. Exterior connection points shall be coordinated with Ft. Polk.
 - b. CATV/Satellite Outlets: Required in the following spaces:
 - 1) **(AM#5) Three** dual jack flush mounted on exterior wall for satellite connection. Locations to be provided by Ft. Polk.
 - 2) See attached room requirements sheets.
 - c. Lockable wall mounted cabinets as required in telecommunication room(s). **(Am #0008) Cabinets shall be sized to accommodate all cabling plus 50% spare capacity.**
2. Furnished and installed by Government after contract completion:
 - a. Television sets.
 - b. Television headend equipment.
 - c. Video projectors.
 - d. Video recorders.
 - e. (Am# 0008) Three satellite dishes.
3. In addition to the requirements of this chapter, comply with all applicable requirements of Chapter 111 - Facility Performance, Chapter D - Services, and Chapter D7 - Telecommunications.
4. Substantiation:
 - a. Design Development: Details of each type of system component; manufacturer data.
 - b. Construction Documents: Detailed layout of all component locations.
 - c. Closeout: Complete functional performance testing as specified in Chapter 00830, under Commissioning.

B. Amenity and Comfort:

1. Accessibility: Comply with requirements of federal authorities for facilities for the disabled.

C. Durability:

1. Moisture Resistance and Thermal Compatibility: Materials that will resist degradation and failure of signals under ambient conditions expected.

D. Operation and Maintenance:

1. System Labeling. All cabling shall be labeled in accordance with TIA/EIA 606. Labeling shall allow easy identification of which cable in the telecommunication room is connected to which outlet.
2. Power Supplies: As specified in Chapter D51.
3. Transmission Capacity:
 - a. Sound Communication Cabling: 10 megabits per second; RJ45 connectors.
 - b. Video/Audio Cabling: Coaxial 75 ohm, plus 2 dB, 100 percent shielded with type F

connectors.

c. Substantiation:

- 1) Closeout: Continuity and performance testing.

PRODUCTS

A. Control Systems for All Applications:

B. Cabling:

1. Use the following:

- a. 75-ohm broadband coaxial cable.

- 1) RG-59 for lengths less than or equal to 150 feet.
 - 2) RG-6 for lengths less than or equal to 250 feet.
 - 3) RG-11 for lengths less than or equal to 400 feet.

C. Connecting hardware:

1. Use the following:

- a. Connectors. Connectors shall be type F.

- b. Jacks. Jacks shall be compatible with type F connectors.

- c. Outlet boxes. Electrical boxes for CATV/Satellite outlets shall be 4-11/16 inch (117 mm) square by 2-1/8 inches (53 mm) deep with minimum 3/8 inch (9 mm) deep single or two gang plaster ring as required. Provide a minimum 1 inch (27 mm) conduit between outlet box and cable tray.

CHAPTER D92**SECURITY CONTROLS****PERFORMANCE****A. Basic Function:**

1. Provide **(Am #0008)** a duplex receptacle inside main library adjacent to main entrance for a government furnished anti-theft system _____. In
addition, provide "rough-in" for future security system at all exterior doors except
mechanical room doors. Rough-in shall include a recessed junction box with cover for
future video camera pointed towards door and a 1 inch (27 mm) conduit with pull wire
between junction box and nearest cable tray.
2. Deleted. (Am #0008)
 - a. Deleted. (Am #0008)
3. Deleted. (Am #0008)
4. Deleted. (Am #0008)
5. Deleted. (Am #0008)
6. Deleted. (Am #0008)
 - a. Deleted. (Am #0008)
 - b. Deleted. (Am #0008)
 - c. Deleted. (Am #0008)
 - d. Deleted. (Am #0008)

B. Deleted. (Am #0008)

1. Deleted. (Am #0008)

C. Operation and Maintenance:

1. Power Supplies:
 - a. UPS For:
 - 1) anti-theft system. Connect to same UPS as provided for other elements.
2. Deleted. (Am #0008)
 - a. Deleted. (Am #0008)
 - b. Deleted. (Am #0008)

END OF CHAPTER D92

Library / Ed Center

Ft Polk, LA



U S Army Corps of Engineers
Fort Worth District

NOTES

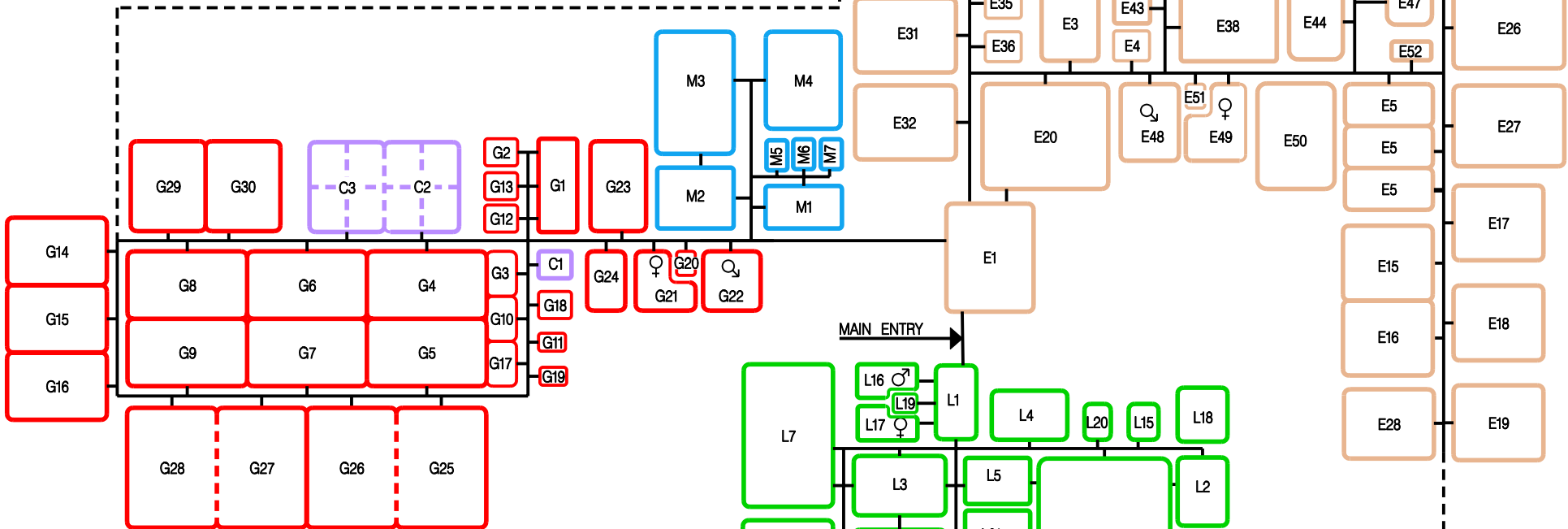
- ALL AREAS ARE IN SQUARE FEET
- THIS DIAGRAM REPRESENTS BASIC ADJACENCIES REQUIRED BY THE DIFFERENT USERS. DESIGNER / BUILDER SHALL EVALUATE THIS DIAGRAM AND COORDINATE WITH USER ALL / ANY MODIFICATIONS AND CHANGES TO THE PROGRAM OF AREAS.
- THE DESIGNER / BUILDER SHALL NOT BE FORCED TO A PARTICULAR SOLUTION OR INFLUENCED BY THIS DIAGRAM TO A PARTICULAR FLOOR PLAN. IT IS ENCOURAGED THAT THE DESIGNER REACH ITS OWN CONCLUSIONS AND RECOMMENDATIONS BASED ON PROGRAM REQUIREMENTS AND CRITERIA.
- DEPENDING ON THE PROPOSER'S SOLUTION, IT MAY BE NECESSARY TO SUBDIVIDE AREAS LIKE LOBBIES AND MECHANICAL ROOMS TO FURTHER SATISFY THE BUILDING NEEDS. FOR EXAMPLE, THE "TESTING AREA" MAY NEED A SEPARATE WAITING ROOM IF THE MAIN LOBBY IS NOT ADEQUATE TO ALLOCATE THIS FUNCTION THERE.
- (Am #008) IT IS DESIRED THAT SOME AREAS LOCATED IN THE EDUCATION CENTER BE MADE AVAILABLE TO THE LIBRARY FOR SHARING OF RESOURCES. IN LIGHT OF THIS, THE LECTURE ROOM (E20) IN THE EDUCATION CENTER HAS BEEN LOCATED IN CLOSE RELATIONSHIP WITH THE LIBRARY.
- (Am #008) BUILDING EXPANDABILITY IS OF UTMOST IMPORTANCE TO THE USER. THE LIBRARY EXPECTS TO SIGNIFICANTLY INCREASE ITS BOOK COLLECTION IN THE YEARS TO COME AND THE EDUCATION CENTER EXPECTS TO INCREASE THE AMOUNT OF CLASSROOMS.
- THE CLASSROOMS LOCATED IN BOTH THE G3 AND ED CTR OF THE FACILITY WILL BE OPERATED AFTER HOURS. DESIGN THESE AREAS SO THAT THEY ARE MADE AVAILABLE TO STUDENTS WHILE THE REST OF THE BUILDING REMAINS CLOSED.
- COORDINATE WITH POST MASTER PLANNING OFFICIALS TO COMPLEMENT ALL OTHER FACILITIES PLANNED FOR THIS AND OTHER SURROUNDING SITES. IT IS DESIRABLE THAT ALL BUILDINGS IN THIS AREA BECOME A SMALL "TOWN CENTER" FOR THE FORT POLK COMMUNITY.
- THE FOLLOWING CRITERIA SHOULD ALSO BE RESEARCHED FOR PLANNING OF THIS FACILITY:
 - DG 1110-3-112 DESIGN GUIDE FOR ARMY CONTINUING EDUCATION CENTERS
 - DG 1110-3-110 DESIGN GUIDE FOR ARMY LIBRARIES
 - FORT POLK INSTALLATION DESIGN GUIDE
- THE DESIGNER BUILDER WILL DESIGN THE LOADING / UNLOADING AREA OF THE LIBRARY FOR DELIVERY OF BOOKS IN CASES OF VARIOUS SIZES. AN ELEVATED PLATFORM IS NOT REQUIRED FOR THIS FUNCTION.
- SHELVING: SHELVES INDICATED FOR STORAGE, CLASSROOMS OR JANITOR CLOSETS SHALL BE PERMANENT, ADJUSTABLE BUILT-IN TYPE. SHELVING FOR BOOK OR MAGAZINE DISPLAY, STACKING OR SORTING WILL BE STAND ALONE TYPE.
- PROJECTION SCREENS SHALL BE RECESSED IN THE CEILING AND MANUALLY OPERATED, EXCEPT THAT SCREENS LARGER THAN 48" X 72" WILL BE ELECTRICALLY OPERATED.

LEGEND

- PRIMARY RELATIONSHIP
- - - - - SECONDARY CONNECTION
- DASHED LINES BETWEEN ROOMS INDICATE MOVEABLE PARTITIONS.
- DASHED BLOCKS INDICATE EXTERIOR ACTIVITY (WITH ROOF)

DCFA Ed Div

E1 LOBBY	500	E16 CLASSROOM 25PN	700	E37 ED DIV DIRECTOR	270
E2 NOT USED		E17 CLASSROOM 25PN	700	E38 ADMINISTRATION	600
E3 BREAK / VENDING	425	E18 SATELLITE CLASS 25PN	700	E39 - 43 COUNSELORS	650
E4 COMMUNICATIONS ROOM	100	E19 CLASSROOM 25PN	700	E44 - E47 4 COLLEGES	2410
E5 GENERAL STORAGE	1000	E20 LECTURE 52PN	1250	E48 - E49 RESTROOMS	1000
E6 TRAINING MATERIALS STORAGE	50	E25 SCIENCE LAB	1250	E50 MECHANICAL ROOM	750
E7 TESTING STORAGE	120	E26 VTC CLASSROOM 30PN	800	E51 JANITOR	70
E8 INFORMATION & REGISTRATION	150	E27 VTC CLASSROOM 30PN	800	E52 SUPPLY RM	120
E9 TESTING & OBSERVATION	800	E28 CULINARY ARTSKITCHEN	500	E53 4 COLLEGES	130
E10 NOT USED		E31 COMPUTER LAB 20PN	700	E54 4 COLLEGES	130
E11 NOT USED		E32 COMPUTER LAB 20PN	700		
E12 LANGUAGE LAB	700	E33 STAFF LOUNGE	225	15% CIRC., WALLS, ETC.	3750
E13 NOT USED		E34 LANG. OFF. & LIBRARY	450	TOTAL DCFA	24,140
E14 NOT USED		E35 LANG. LAB INSTRUCTOR	120		
E15 CLASSROOM 25PN	700	E36 LANG. LAB INSTRUCTOR	120		



G3 / Mil Schools

G1 MSP TRNG COORD	120
MSP TRNG TECH	75
MSP TRNG TECH	75
MSP FILE ROOM	120
G2 MSP OFFICE AUTO CLERK	100
G3 MOS CONTRACTOR	150
G4-9 MSP CLASSROOMS 30PN	5400
G10 MSP GENERAL STORAGE	150
G11 MSP COPY ROOM	100
G12 ADLP ADMINISTRATOR	120
G13 ADLP ASST	100
G14-16 ADLP CLASSROOMS 17PN	2100
G17 ADLP GENERAL STORAGE	150
G18 ADLP FILE ROOM	120
G19 ADLP COPY ROOM	100
G20 JANITOR	55
G21 - 22 RESTROOMS	370
G23 BREAK / VENDING	425
G24 STAFF LOUNGE	225
G25 CLASSROOM 30PN	900
G26 CLASSROOM 30PN	900
G27 CLASSROOM 30PN	900
G28 CLASSROOM 30PN	900
G29 COMPUTER LAB 20PN	700
G30 COMPUTER LAB 20PN	700
15% CIRC., WALLS, ETC.	2663

TOTAL G3 / MIL SCHOOLS 17718

MOS Library (ALC)

M1 SHARED OFFICE	200
M2 SELF PACED INSTRUCTION	300
M3 MOS READING RM	1000
M4 PLATO COMPUTER LAB	900
M5 SELF STUDY	67
M6 SELF STUDY	67
M7 SELF STUDY	67
15% CIRC., WALLS, ETC.	390

TOTAL - MOS LIBRARY 2991

CPAC DoD SCHOOLS

C1 ADMINISTRATOR	100
C2 CLASSROOM 25PN	700
C3 CLASSROOM 25 PN	700
15% CIRC., WALLS, ETC.	237

TOTAL - CPAC 1737

Library

L1 LOBBY	150
L2 SHIPPING & RECEIVING	250
L3 CONTROL AREA	400
L4 STAFF LOUNGE/KITCHEN	250
L5 LIBRARIAN'S OFFICE	200
L6 STACK AREA	3500
L7 CHILDREN'S ROOM	1000
L8 TECHNICAL SERVICES	2100
L9 MILITARY READING ROOM	750
L10 PERIODICALS	600
L11 REFERENCE ROOM	1000
L12 STUDY AREAS	1500
L13 STORAGE	1000
L14 MULTI-MEDIA	1100
L15 COMMUNICATIONS	120
L16 - 17 RESTROOMS	350
L18 MECHANICAL	255
L19 JANITOR	50
L20 STAFF TOILET & LOCKERS	100
L21 LIBRARY TECHNICIANS	250

15% CIRC., WALLS, ETC. 2239

TOTAL - LIBRARY 17164

ACCOMPANYING AMENDMENT NO. 0008 TO SOLICITATION NO. DACA63-02-R-0007

ATTACHMENT C

Room Functional Requirements
For
Consolidated Library/Education Center

Room Requirements

Department: Ed Div

Room Name: Classrooms

C2-3

Relationships

Primary

In general classroom area

Secondary

Access to G3 classroom area

Programming

Occupants 25

Room Dimensions

Sq Ft Required: 700

No of Rooms Required: 1 ea.

Time and Days of Operation: M – S 0800 – 2200

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors Dead Bolt Locks

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical

Duplex receptacle above ceiling for future ceiling mounted projector. Three duplex receptacles in front of room - one near right corner (facing front of room), one **(Am #0008) centered**, and one adjacent to TV mounting bracket.

Communications

Dual jack outlet located near corner duplex receptacle. Dual jack (one for satellite and one for CATV) TV outlet adjacent to TV mounting bracket.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for max. 25 students & lecture stand.

Space for 1 table / chair for instructor.

(Am #008) Storage & kitchenette requirement deleted.

Equipment and Type

Dry erase marker board min. 42" x 60"

Large projection screen min. 48" x 72"

Remarks

Lighting: 50 footcandles with dimmer control.

Provide proper structural support and mounting bracket in ceiling for future multi media projector to be provided by others. In addition, provide all necessary conduit (with pull wire) and j-boxes to allow for future installation of wiring between projector and a CPU to be located in front right corner of room.

Provide mounting bracket on wall near ceiling to the right of projection screen to accommodate a 27 inch TV and a separate VCR.

C2-C3 classrooms need to be subdivided into 4 breakout areas each by means of flexible partitions.

Room Requirements

Department: Common

Room Name: Lobby

E1

Relationships

Primary

Main lobby area for education Center.

Secondary

Also used as waiting room for Testing function (E7 – E9) within Ed Ctr. Designer-BUILDER may choose to provide separate waiting room for Testing Area.

Programming

Occupants ---

Room Dimensions

Sq Ft Required: 500

No of Rooms Required: 1 ea.

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring CPT or Tile

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical

General use duplex receptacle(s) and one duplex receptacle for amplifier above ceiling near speaker.

Communications

Rough-in for recessed PA speaker and video camera. Coordinate location with waiting area.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for **(Am #008) 30** Chairs if used as Waiting Room for Testing Area

Equipment and Type

Space for wall mounted video camera, recessed ceiling speaker and PA amplifier.

Remarks

Lighting level: 10 footcandles at finished floor.

Lobby may be partially used as a waiting area for personnel seeking counseling.

Provide conduits (with pull wires) and j-boxes for future wiring to allow monitoring of waiting area within lobby from rooms E37, and E39 thru E43 utilizing one video camera.

Provide mounting rack above ceiling to support 15 lbs PA amplifier. Coordinate rack location with speaker. Provide required conduits (with pull wires) and j-boxes for future wiring between amplifier and individual microphones in rooms E37, and E39 thru E43.

Note: If designer chooses to provide a separate waiting room then all requirements pertaining to the speaker, PA amplifier, and video camera apply to the waiting room and not the lobby.

Room Requirements

Department: Common

Room Name: Break / Vending

E3

Relationships

Primary

Near restrooms and lobby areas.

Secondary

Near classroom areas.

Programming

Occupants ---

Room Dimensions

Sq Ft Required: 425

No of Rooms Required: 1 ea.

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring Tile

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
One duplex receptacle per vending machine. Additional general purpose receptacles.

Communications
No requirements

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

NR

Equipment and Type

Space for 4 vending machines minimum.

Remarks

Vending machines N.I.C.

Lighting level: 30 footcandles

Room Requirements

Department: Ed Div

Room Name: Telecommunications Room

E4

Relationships

Primary

N/R

Secondary

N/R

Programming

Occupants ---

Room Dimensions

Sq Ft Required: (Am #0008) As needed to meet the requirements of Chapter D7 Telecommunications, but room(s) shall be no smaller than 10' x 10'.

No of Rooms Required: designer choice

Time and Days of Operation: M – S 24 hrs.

Existing Area

Architecture

Flooring NR

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC See remarks

Plumbing NR

Electrical

Three wall mounted general use duplex receptacles. Two duplex receptacles mounted on plywood backboard each with a dedicated circuit. One quadraplex receptacle mounted on each equipment rack each with a dedicated circuit.

Communications

See design and performance requirements.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

NR

Equipment and Type

See design and performance requirements.

Remarks

Lighting level: 50 footcandles

(Am #0008) Sentence deleted.

Room temperature shall be conditioned utilizing a mechanical system that is independent of the facility's central HVAC system. A thermostat inside the room shall control the temperature.

Room Requirements

Department: Storage

Room Name: General Storage

E5

Relationships

Primary

Near classrooms.

Secondary

Accessible from delivery area.

Programming

Occupants ---

Room Dimensions

Sq Ft Required: 1000

No of Rooms Required: 3

Time and Days of Operation: M – S 24 hrs.

Existing Area

Architecture

Flooring NR

Ceiling Drywall

Walls Drywall

Doors NR

Windows No windows

Acoustics NR

Engineering

HVAC

Plumbing

Electrical

One duplex receptacle per wall

Communications

No requirements

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Maximize storage shelving.

Equipment and Type

Remarks

Lighting level: 10 footcandles

Room Requirements

Department: Storage

Room Name: Training Materials Storage

E6

Relationships

Primary

Close to E5

Secondary

Close to testing area.

Programming

Occupants ---

Room Dimensions

Sq Ft Required: 50

No of Rooms Required: 1 ea.

Time and Days of Operation: M – S 24 hrs.

Existing Area

Architecture

Flooring NR

Ceiling Drywall

Walls Drywall

Doors NR

Windows No windows

Acoustics NR

Engineering

HVAC Per Code

Plumbing Per Code

Electrical NR

Communications NR

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Maximize storage shelves

Equipment and Type

Provide slop sink

Remarks

Lighting level: 5 footcandles

Room Requirements

Department: Testing

Room Name: Storage / Information & Registration

E7, 8

Relationships

Primary

Near Testing E10

Secondary

Near Self Study E12

Programming

Occupants 3 persons

Room Dimensions

Sq Ft Required: 270 (120 for storage)

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	No exterior windows
Acoustics	NR

Engineering

HVAC

Plumbing

Electrical

Five wall mounted duplex receptacles minimum.
Locate all receptacles in registration area.

Communications

Two dual jack outlets located in registration area.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for 3 desks & chairs, Work Table, Shelves/
Cab., Trash Can, Clock, Paper Storage, 3 File
Cabinets, 6 safes (2W x 4D x 5H) one big door

Equipment and Type

Space for Copier, 1 CPU, 1 printer.

Remarks

This is actually one room, E7 and E8 functions to be
carried out in same room. Need glass panel to look
into E9, E31.

Lighting level: 50 footcandles

Room Requirements

Department: Ed Div

Room Name: Testing & Observation

E9

Relationships

Primary

Near Information & Registration E8

Secondary

Near Testing Storage E7

Programming

Occupants Up to 35 persons

Room Dimensions

Sq Ft Required: 800

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics STC 50

Engineering

HVAC

Plumbing

Electrical

General purpose duplex receptacles throughout the room.

Communications

One dual jack outlet at front of room.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for table for teacher, maximize **(Am #008) tables** for testers, minimum 25.

Equipment and Type

Remarks

Special observation windows to testers from reception area (E7 & E8).

Mirrors in back corner clgs. at room, convex type.

Signage on walls

Lighting: 50 footcandles with dimmer control

Room Requirements

Department: Ed Div

Room Name: Language Lab

E12

Relationships

Primary

Near E9 & E34

Secondary

NR

Programming

Occupancy 30 students

Room Dimensions

Sq Ft Required: 700

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC

Plumbing

Electrical

Minimum of two duplex receptacles for large screen TV's at front of room and general purpose duplex receptacles throughout room.

Communications

Dual jack outlet at front of room and dual jack TV outlet at front of room for satellite connections.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for storage of video/audio tapes

Equipment and Type

Space for two large screen TV's

Remarks

See design guide for layout.

Wired so instructor can monitor students.

Lighting: 50 footcandles

Room Requirements

Department: Ed Div

Room Name: Classrooms

E15 -17

Relationships

Primary

In general classroom area

Secondary

Access to G3 classroom area

Programming

Occupants 25

Room Dimensions

Sq Ft Required: 700

No of Rooms Required: 1 ea.

Time and Days of Operation: M – S 0800 – 2200

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors Dead Bolt Locks

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
(Am #0008) Same as rooms E31 and E32 except 26 recessed floor boxes (25 students and 1 instructor).

Communications
(Am #0008) Same as rooms E31 and E32.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for max. 25 students & lecture stand.

Space for 1 table / chair for instructor.

(Am #008) Storage & kitchenette requirement deleted.

Equipment and Type

Dry erase marker board min. 42" x 60"

Large projection screen min. 48" x 72"

Remarks

Lighting: 50 footcandles with dimmer control.

(Am #0008) Paragraph deleted.

(Am #0008) Sentence deleted.

(Am #0008) Sentence deleted.

Room Requirements

Department: Ed Div

Room Name: Satellite Class

E18

Relationships

Primary

In general classroom area

Secondary

Access to G3 classroom area

Programming

Occupants 25

Room Dimensions
Sq Ft Required: 700

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	Dead Bolt Locks
Windows	Insulated Single or Double-Hung
Acoustics	NR

Engineering

HVAC
Plumbing
Electrical

Quadraplex receptacle centered at front of room for future 2-way conference equipment and one duplex receptacle per wall.

Communications

One dual jack outlet for 2-way conference equipment and one dual jack TV outlet for satellite connections at front of room.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

 (Am #008) Storage & kitchenette requirement deleted.
Equipment and Type

Space for Satellite 2-way conference equipment

Space for large monitor

Remarks

Lighting: 50 footcandles with dimmer control.

 (Am #008) Sentence deleted.

Room Requirements

Department: Ed Div

Room Name: Classroom

E19

Relationships

Primary

In general classroom area

Secondary

Access to G3 classroom area

Programming

Occupants 25

Room Dimensions

Sq Ft Required: 700

No of Rooms Required: 1 ea.

Time and Days of Operation: M – S 0800 – 2200

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors Dead Bolt Locks

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical

Duplex receptacle above ceiling for future ceiling mounted projector. Three duplex receptacles in front of room - one near right corner (facing front of room), one **(Am #0008) centered**, and one adjacent to TV mounting bracket.

Communications

Dual jack outlet located near corner duplex receptacle. Dual jack (one for satellite and one for CATV) TV outlet adjacent to TV mounting bracket.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for max. 25 student **(Am #008) tables &** lecture stand.

Space for 1 table / chair for instructor.

(Am #008) Storage & kitchenette requirement deleted.

Equipment and Type

Dry erase marker board min. 42" x 60"

Large projection screen min. 48" x 72"

Remarks

Lighting: 50 footcandles with dimmer control.

Provide proper structural support and mounting bracket in ceiling for future multi media projector to be provided by others. In addition, provide all necessary conduit (with pull wire) and j-boxes to allow for future installation of wiring between projector and a CPU to be located in front right corner of room.

Provide mounting bracket on wall near ceiling to the right of projection screen to accommodate a 27 inch TV and a separate VCR.

(Am #008) Sentence deleted.

Room Requirements

Department: Ed Div

Room Name: Lecture Hall

E20

Relationships

Primary

Centrally located, near lobby area

Secondary

Accessible to Library, G3

Programming

Occupants 50 persons

Room Dimensions

Sq Ft Required: 1250

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 – 2200 (*)

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors Dead Bolt Locks

Windows NR

Acoustics NR

Engineering

HVAC

Plumbing

Electrical

Duplex receptacle above ceiling for future ceiling mounted projector. Three duplex receptacles in front of room - one near right corner (facing front of room), one centered, and one adjacent to TV mounting bracket.

Communications

Dual jack outlet located near corner duplex receptacle. Dual jack (one for satellite and one for CATV) TV outlet adjacent to TV mounting bracket.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for 50 (**Am #008**) student tables, Lecture Stand, 1 Table / chair for instructor

Equipment and Type

Dry erase marker board min. 48" x 96"
Large projection screen min. 60" x 96"

Remarks

Lighting: 50 footcandles with dimmer control

Provide proper structural support and mounting bracket in ceiling for future multi media projector to be provided by others. In addition, provide all necessary conduit (with pull wire) and j-boxes to allow for future installation of wiring between projector and a CPU to be located in front corner of room.

Provide mounting bracket on wall near ceiling to the right of projection screen to accommodate a 27 inch TV and a separate VCR

Room Requirements

Department: Ed Div

Room Name: Science Lab

E25

Relationships

Primary

In general classroom area

Secondary

Access to G3 classroom area

Programming

Occupants 30

Room Dimensions
Sq Ft Required: 1250

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC
Plumbing
Electrical

Duplex receptacle for instructor's CPU and general use receptacles throughout room. Also, duplex receptacle above ceiling for future ceiling mounted projector.

Communications

One dual jack outlet for instructor's CPU.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

 Student lab Counters w/sinks for 30 students, per design guide.
 Space for chem. storage cabinet or provide closet.
 Built-in book shelving on one wall for manuals, reference material.

Equipment and Type

Space for CPU for instructor

Dry erase marker board min. 42" x 60"

Large projection screen min. 48" x 72"

Space for Projection Equipment - See remarks

Remarks

Provide Safety Shower & Eye Wash

Lighting: 75 footcandles with dimmer control

Provide proper structural support and mounting bracket in ceiling for future multi media projector to be provided by others. In addition, provide all necessary conduit (with pull wire) and j-boxes to allow for future installation of wiring between projector and instructor's CPU.

This classroom will be used for both Chemistry & Biology classes.

Room Requirements

Department: Ed Div

Room Name: VTC Classrooms (Video Two-way Conference)

E26, 27

Relationships

Primary

In general classroom area

Secondary

Access to G3 classroom area

Programming

Occupants 30

Room Dimensions

Sq Ft Required: 800

No of Rooms Required: 2

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	Insulated Single or Double-Hung
Acoustics	NR

Engineering

HVAC
Per Code

Plumbing
Per Code

Electrical
Same requirements as rooms G14-16 except 31 recessed floor boxes are required.

Communications
Same requirements as rooms G14-16 except for 30 students

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for tables & chairs (30 plus 1 instructor)

Equipment and Type

Space for big screen monitor, video cameras, microphones @ ea. desk.

Remarks

A path between each recessed box and VTC system is required for future installation of microphone cables.

Design will be identical to that for rooms G14-16 except for more students.

Lighting: 50 footcandles. Lighting shall be controlled by two dimmer switches (one switch for fixtures in front half of room and one for back half) and fixture layout shall be coordinated with workstation locations to minimize blooming (VTC system has a video camera that can focus on each student at each workstation).

Room Requirements

Department: Ed Div

Room Name: Culinary Arts Kitchen

E28

Relationships

Primary

In general classroom area

Secondary

Access to G3 classroom area

Programming

Occupancy 25

Room Dimensions

Sq Ft Required: 500

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring Tile

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC
Per Codes

Plumbing
Per Codes

Electrical
Provide required power to each piece of kitchen equipment.

Communications
Two dual jack outlets

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Cutting tables, tables & chairs (eat or study).

Provide sufficient amount for 25 students

Equipment and Type

Provide a typical commercial kitchen arrangement with appropriate amount of stoves, dishwashers, refrigerators, freezers, & sinks, etc. for 25 students.

Remarks

Lighting: 70 footcandles

Room Requirements

Department: Ed Div

Room Name: Computer Lab

E31 - 32

Relationships

Primary

In general classroom area

Secondary

Access to G3 classroom area

Programming

Occupants 20 students + one instructor

Room Dimensions

Sq Ft Required: 700

No of Rooms Required: 1 ea

Time and Days of Operation: M – S 0800 - 2200

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	Insulated Single or Double-Hung
Acoustics	NR

Furnishings

Furniture

Space for tables & chairs, instructor's table w/ chair, locking cabinets & shelves for supply, chemical storage or provide a min. 20 s.f. storage closet.

Equipment and Type

Dry erase marker board min. 48" x 72"
Space for 20 CPU's for students and 1 for instructor

Space for printer, projection screen same as E14

Engineering

HVAC

To support CPU's

Plumbing

Electrical

21 recessed floor boxes containing a duplex receptacle and two 8-pin modular jacks for CPU's. Coordinate locations with furniture layout. In addition, one duplex receptacle per wall.

Communications

In addition to above, two dual jack outlets for printers.

Fire Alarm System

Per NFPA and ADA

Remarks

Lighting: 50 footcandles with dimmer control

Room Requirements

Department: Staff Office

Room Name: Staff Lounge

E33

Relationships

Primary

Close to restrooms, office areas

Secondary

NR

Programming

Occupants ---

Room Dimensions

Sq Ft Required: 225 ea.

No of Rooms Required: 2

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC

Plumbing

Electrical

One duplex receptacle per wall minimum including one for refrigerator. One dedicated receptacle for microwave.

Communications

Two dual jack outlets

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for 2 tables, 8 chairs

Equipment and Type

Bulletin Board 36" x 60"

Kitchen cabinet & storage w/ space for microwave.

Space for refrigerator

Remarks

Lighting: 30 footcandles

Room Requirements

Department: Ed Div, Language Lab

Room Name: Language Lab Office & Library

E34

Relationships

Primary

Near language Lab

Secondary

Near Instructor's Offices

Programming

Occupants 2 persons

Room Dimensions

Sq Ft Required: 450

No of Rooms Required:

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC
Per Codes

Plumbing
Per Codes

Electrical
Duplex receptacles coordinated with furniture and equipment layout.

Communications
Three dual jack outlets coordinated with furniture and equipment layout.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Shelves 12 inches deep on one wall.
Space for 2 desks w/ chairs, file cabinets

Equipment and Type

Space for copier

Remarks

Lighting: 50 footcandles

Room Requirements

Department: Ed Div**Room Name:** Language Instructor**E35, 36**

Relationships

Primary

Near language Lab

Secondary

NR

Programming

Occupants 1 person**Room Dimensions****Sq Ft Required:** 120**No of Rooms Required:** 2**Time and Days of Operation:** M – F 0800 - 1630**Existing Area**

Architecture

Flooring CPT**Ceiling** ACT**Walls** Drywall**Doors** NR**Windows** NR**Acoustics** NR

Engineering

HVAC Per Code**Plumbing** Per Code**Electrical**

Four duplex receptacles minimum coordinated with furniture layout.

Communications

Two dual jack outlets and one TV outlet for satellite connection.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for desk & chairs, 5 file cabinets min. & bookcase.

Equipment and Type

Space for TV

Remarks

Lighting: 50 footcandles

Library & Ed Cntr, Fort Polk, LA

Room Requirements

Department: Ed Div

Room Name: Director's Office

E37

Relationships

Primary

Near E38, (Am #0008) Administration

Secondary

Programming

Occupants 1 person

Room Dimensions

Sq Ft Required: 270

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC

Per Code

Plumbing

Per Code

Electrical

Five wall mounted duplex receptacles coordinated with furniture layout. Flush mounted j-boxes (2 total) with cover for future wiring for TV monitor connection to video camera in room E1 and future wiring for microphone (on desk) connection to amplifier located above ceiling in room E1.

Communications

Two dual jack outlets coordinated with furniture layout.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for desk, round table, file cabinets (3), bookcase & credenza

Equipment and Type

Space for TV monitor connected to video camera in lobby or waiting room (See E1).

Remarks

Lighting: 50 footcandles

Room Requirements

Department: Ed Div

Room Name: Administration Office

E38

Relationships

Primary

Other Ed staff

Secondary

NR

Programming

Occupants 4 person

Room Dimensions

Sq Ft Required: 600

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC Per Code

Plumbing Per Code

Electrical

Ten wall mounted duplex receptacles minimum coordinated with furniture layout.

Communications

Four dual jack outlets coordinated with furniture layout.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for 1 desk w/ chair, file cabinets (5 min.) & bookcase.

Equipment and Type

Remarks

Lighting: 50 footcandles

Room Requirements

Department: Ed Div Staff Office

Room Name: Counselors

E39 - 43

Relationships

Primary

Other Ed Staff

Secondary

NR

Programming

Occupants 1 person

Room Dimensions

Sq Ft Required: 130 ea.

No of Rooms Required: 5

Time and Days of Operation:

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC
Per Code

Plumbing
Per Code

Electrical
Four duplex receptacles. Flush mounted j-boxes (2 total) with cover for future wiring for TV monitor connection to video camera in room E1 and future wiring for microphone (on desk) connection to amplifier located above ceiling in room E1.

Communications
Two dual jack outlets coordinated with furniture layout.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for desk & chair, 2 guest chairs, file cabinet & bookcase

Equipment and Type

Remarks

Lighting: 50 footcandles

Room Requirements

Department: 4 Colleges

Room Name: Private Offices

E44 – 47

Relationships

Primary

Near classrooms

Secondary

NR

Programming

Occupants 1 to 5 persons

Room Dimensions

Sq Ft Required: 2670 (See Remarks)

No of Rooms Required: 1 ea. w/ storage closet & 120 s.f. director's office

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC
Per Code

Plumbing
Per Code

Electrical
General use duplex receptacles coordinated with furniture location

Communications
Rm E44 – five dual jack outlets, Rm E45 – eight dual jack outlets, Rm E46 – six dual jack outlets, Rms E47, E53, & E54 – three dual jack outlets. These are minimum requirements. Coordinate location with furniture layout.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for tables, file cabinet (1 per desk), desks & chairs, guest chairs.

Storage closet w/ book shelves in each area.

Equipment and Type

Space for copier & fax machine.

Remarks

Provide separate director's private office in each area except LSU, which is itself an office.

E44 (CMU) - 500SF
E45 (CTC) - 1100SF
E46 (UIU) - 660SF
E47 (LSU) - 150SF
E53,54 (Unassigned) – 130SF ea.

Lighting : 50 footcandles

Room Requirements

Department: Ed Div

Room Name: Restrooms

E48 - 49

Relationships

Primary

NR

Secondary

NR

Programming

Occupancy ---

Room Dimensions

Sq Ft Required: 1000

No of Rooms Required: 1 ea.

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring Tile

Ceiling Drywall or plaster

Walls Tile

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC Per Code

Plumbing Per Code

Electrical
GFCI duplex receptacle for every two sinks (minimum of one).

Communications
No requirements.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Equipment and Type

Provide plumbing fixtures & accessories for required male & female population.

Remarks

Lighting: 20 footcandles with additional lighting over mirrors.

Room Requirements

Department: Ed Div**Room Name:** Mechanical**E50**

Relationships

Primary

NR

Secondary

NR

Programming

Occupants ---**Room Dimensions****Sq Ft Required:** 750**No of Rooms Required:** 1**Time and Days of Operation:** 24 hrs.**Existing Area**

Architecture

Flooring Conc.**Ceiling** NR**Walls** CMU**Doors** NR**Windows** NR**Acoustics** NR

Engineering

HVAC Per Code**Plumbing** Per Code**Electrical**
One duplex receptacle per wall**Communications**
One single jack (voice) outlet near door mounted 1220 mm AFF. See remarks for additional info.**Fire Alarm System**
Manual pull station and combination audio/visual device. Smoke detector above fire alarm panel (unless fire alarm panel is in room L18).

Per NFPA and ADA

Furnishings

Furniture**Equipment and Type**

Remarks

Lighting: 15 footcandles

Provide separate electrical closet/room as required.

Provide 27 mm conduit with pull wire between data terminal cabinet (and/or master direct digital control panel) and backboard in nearest (if more than one) telecommunications room. Also provide 27 mm conduit with pull wire between data terminal cabinet (and/or master direct digital control panel) and electrical meter located on secondary side of exterior service transformer.

Room Requirements

Department: Ed Div

Room Name: Janitor & Supply Rm

E51 - 52

Relationships

Primary

NR

Secondary

NR

Programming

Occupants ---

Room Dimensions

Sq Ft Required: 190 (See Remarks)

No of Rooms Required: 2

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring Tile

Ceiling NR

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC Per Code

Plumbing Per Code

Electrical
One duplex receptacle in E51 and two in E52.

Communications
No requirements

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Equipment and Type

Provide service sink & storage shelving on both rooms.

Remarks

E51 Janitor – 70SF
E52 Supply Rm – 120SF

Lighting: 10 footcandles

Room Requirements

Department: 4 Colleges

Room Name: Private Offices

E53 - 54

Relationships

Primary

Near classrooms

Secondary

NR

Programming

Occupants 1 to 5 persons

Room Dimensions

Sq Ft Required: 2670 (See Remarks)

No of Rooms Required: 1 ea. w/ storage closet & 120 s.f. director's office

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC
Per Code

Plumbing
Per Code

Electrical
General use duplex receptacles coordinated with furniture location

Communications
Rm E44 – five dual jack outlets, Rm E45 – eight dual jack outlets, Rm E46 – six dual jack outlets, Rms E47, E53, & E54 – three dual jack outlets. These are minimum requirements. Coordinate location with furniture layout.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for tables, file cabinet (1 per desk), desks & chairs, guest chairs.

Storage closet w/ book shelves in each area.

Equipment and Type

Space for copier & fax machine.

Remarks

Provide separate director's private office in each area except LSU, which is itself an office.

E44 (CMU) - 500SF
E45 (CTC) - 1100SF
E46 (UIU) - 660SF
E47 (LSU) - 150SF
E53,54 (Unassigned) – 130SF ea.

Lighting : 50 footcandles

Room Requirements

Department: ADLP / Mil Schools

Room Name: MSP Training Administration Office

G1

Relationships

Primary

Other G3 staff

Secondary

Near G3 classrooms

Programming

Occupants 3

Room Dimensions

Sq Ft Required: 390

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
Seven duplex receptacles minimum.

Communications
Five dual jack outlets minimum coordinated with furniture layout.

Fire Alarm System
As required per NFPA and ADA

Furnishings

Furniture

Space for 3 desks w/ chairs, 3 bookcases, 12 file cabinets min. and typing table.

Equipment and Type

Space for 1 computer w/ table, adding machine & typewriter.

Remarks

Lighting level: 50 footcandles

Room Requirements

Department: ADLP / Mil Schools

Room Name: Office Automation Clerk

G2

Relationships

Primary

Other G3 staff

Secondary

NR

Programming

Occupants 1

Room Dimensions

Sq Ft Required: 100

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
Four duplex receptacles minimum

Communications
Two dual jack outlets coordinated with furniture layout

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for desk w/ chair, bookcase & file cabinet.

Equipment and Type

Space for computer w/ printer, adding machine, typewriter & fax machine.

Remarks

Lighting: 50 footcandles

Room Requirements

Department: ADLP / Mil Schools

Room Name: MOS Contractor

G3

Relationships

Primary

Near other G3 staff

Secondary

Near classrooms

Programming

Occupants 2

Room Dimensions

Sq Ft Required: 150

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows 2 if possible

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
Five duplex receptacles minimum

Communications
Three dual jack outlets minimum coordinated with furniture layout.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for two desks w/ chairs, file cabinets (4), & 2 bookcases.

Equipment and Type

Space for 1 computer w/ printer, fax machine & adding machine.

Remarks

Lighting: 50 footcandles

Room Requirements

Department: ADLP / Mil Schools

Room Name: Classrooms

G4 - 9

Relationships

Primary

In general classroom area

Secondary

Access to Ed Ctr classrooms

Programming

Occupants 30 students / 2 instructors

Room Dimensions

Sq Ft Required: 900 ea.

No of Rooms Required: 6

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical

Duplex receptacle above ceiling for future ceiling mounted projector. Three duplex receptacles in front of room - one near right corner (facing front of classroom), one centered, and one adjacent to TV mounting bracket.

Communications

Dual jack outlet located near corner duplex receptacle. Dual jack (for satellite and CATV) TV outlet adjacent to TV mounting bracket.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for 15 tables & 30 student chairs, 1 teacher desk, 2 teacher chairs, bookcases & file cabinet.

Provide small break area / in back of room w/ sink.

Equipment and Type

Dry erase marker board min. 42" x 60"

Large projection screen min. 48" x 72"

Space for computer with printer & multi media projector, see remarks.

Remarks

Storage in back of room (at least 25 s.f.).

Lighting: 50 footcandles

Provide proper structural support and mounting bracket in ceiling for future multi media projector to be provided by others. In addition, provide all necessary conduit (with pull wire) and j-boxes to allow for future installation of wiring between projector and a CPU to be located in front corner of room.

Provide mounting bracket on wall near ceiling to the right of projection screen to accommodate a 27 inch TV and a separate VCR.

Room Requirements

Department: ADLP / Mil Schools

Room Name: General Storage

G10

Relationships

Primary

Near G3 admin area

Secondary

Near classrooms

Programming

Occupants 0

Room Dimensions

Sq Ft Required: 150

No of Rooms Required: 1 ea.

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring Tile or Concrete

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
No requirements

Communications
No requirements

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for maximum amount of storage cabinets.

Equipment and Type

Remarks

Needs shelves to store textbooks, video tapes, support equipment, cleaning supplies, etc.

Shelves should be on 3 of 4 walls.

One storage for ADLP another for MilSchools.

Lighting: 10 footcandles

Room Requirements

Department: ADLP / Mil Schools

Room Name: Copy Room

G11

Relationships

Primary

Near G3 admin area

Secondary

NR

Programming

Occupants 0

Room Dimensions

Sq Ft Required: 50

No of Rooms Required: 1 ea.

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring Tile

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
Two duplex receptacles minimum

Communications
One dual jack outlet

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Equipment and Type

Space for one copier, table (30" x 72")

Remarks

One room for ADLP, another for MilSchools.

Lighting: 20 footcandles

Room Requirements

Department: ADLP / Mil Schools

Room Name: ADLP Administrator

G12

Relationships

Primary

Near other G3 staff

Secondary

Near ADLP classrooms

Programming

Occupants 1

Room Dimensions

Sq Ft Required: 120

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
Three duplex receptacles minimum

Communications
Two dual jack outlets coordinated with furniture layout.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for desk w/ chair, bookcase & file cabinets (5 min.).

Equipment and Type

Space for computer w/ printer, adding machine & wide mouth scanner, plotter.

Remarks

Lighting: 50 footcandles

Room Requirements

Department: ADLP / Mil Schools

Room Name: ADLP Assistant Office

G13

Relationships

Primary

Near G12, other G3 staff

Secondary

Near ADLP classrooms

Programming

Occupants 1

Room Dimensions

Sq Ft Required: 100

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
Four duplex receptacles minimum

Communications
Two dual jack outlets coordinated with furniture layout.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for desk w/ chair & file cabinets.

Equipment and Type

Space for computer w/ printer & adding machine.

Remarks

Lighting: 50 footcandles

Room Requirements

Department: ADLP / Mil Schools

Room Name: Distance Learning Classrooms

G14 - 16

Relationships

Primary

In general classroom area

Secondary

Access to Ed Ctr classroom area

Programming

Occupants 17

Room Dimensions

Sq Ft Required: 700

No of Rooms Required: 3

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical

17 recessed floor boxes containing a duplex receptacle, two 8-pin modular jacks, and room for microphone cable. Wall mounted quadraplex receptacle and dual 8-pin modular jack centered in front of room for user provided and installed VTEL system.

Communications

In addition to electrical above, provide two wall mounted dual jack outlets.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Equipment and Type

Space for 17 computer workstations, 1 VTEL system, fax machine, cabinets & servers.

Remarks

A path between each recessed box and VTEL system is required for future installation of microphone cables.

During design phase contractor shall visit existing ADLP classrooms on Ft. Polk to obtain all essential information for complete design requirements. Particularly spacing information for recessed boxes.

Lighting: 50 footcandles. Lighting shall be controlled by two dimmer switches (one switch for fixtures in front half of room and one for back half) and fixture layout shall be coordinated with workstation locations to minimize blooming (VTEL system has a video camera that can focus on each student at each workstation).

Room Requirements

Department: ADLP / Mil Schools

Room Name: General Storage

G17

Relationships

Primary

Near G3 admin area

Secondary

Near classrooms

Programming

Occupants 0

Room Dimensions

Sq Ft Required: 150

No of Rooms Required: 1 ea.

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring Tile or Concrete

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
No requirements

Communications
No requirements

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for maximum amount of storage cabinets.

Equipment and Type

Remarks

Needs shelves to store textbooks, video tapes, support equipment, cleaning supplies, etc.

Shelves should be on 3 of 4 walls.

One storage for ADLP another for MilSchools.

Lighting: 10 footcandles

Room Requirements

Department: ADLP / Mil Schools

Room Name: ADLP File Room

G18

Relationships

Primary

Near G3 admin area

Secondary

NR

Programming

Occupants 0

Room Dimensions

Sq Ft Required: 120

No of Rooms Required: 1 ea.

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring Tile

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
Duplex receptacles

Communications
Dual jack outlet coordinated with scanner and plotter locations.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for file cabinets

Equipment and Type

Space for 5' long x 3' deep x 3' tall scanner

Space for 4' long x 2' deep x 4' tall plotter

Remarks

Lighting: 30 footcandles

Room Requirements

Department: ADLP / Mil Schools

Room Name: Copy Room

G19

Relationships

Primary

Near G3 admin area

Secondary

NR

Programming

Occupants 0

Room Dimensions

Sq Ft Required: 50

No of Rooms Required: 1 ea.

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring Tile

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
Two duplex receptacles minimum

Communications
One dual jack outlet

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Equipment and Type

Space for one copier, table (30" x 72")

Remarks

One room for ADLP, another for MilSchools.

Lighting: 20 footcandles

Room Requirements

Department: ADLP / Mil Schools

Room Name: Janitor

G20

Relationships

Primary

NR

Secondary

NR

Programming

Occupants NR

Room Dimensions

Sq Ft Required: 55

No of Rooms Required: NR

Time and Days of Operation: NR

Existing Area

Architecture

Flooring Tile

Ceiling ACT or Drywall

Walls Tile

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
One duplex receptacle

Communications
No requirements

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Provide service sink & storage shelving.

Equipment and Type

Remarks

Lighting: 10 footcandles

Room Requirements

Department: ADLP / Mil Schools

Room Name: Restrooms

G21 - 22

Relationships

Primary

NR

Secondary

NR

Programming

Occupants NR

Room Dimensions

Sq Ft Required: 370

No of Rooms Required: NR

Time and Days of Operation: NR

Existing Area

Architecture

Flooring Tile

Ceiling ACT or Drywall

Walls Tile

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
One GFCI receptacle for every two sinks (one minimum).

Communications
No requirements

Fire Alarm System

Furnishings

Furniture

Equipment and Type

Provide required amount of fixtures for population.

Remarks

Lighting: 20 footcandles with additional lighting above mirrors.

Room Requirements

Department: Common

Room Name: Break / Vending

G23

Relationships

Primary

Near restrooms and lobby areas.

Secondary

Near classroom areas.

Programming

Occupants ---

Room Dimensions

Sq Ft Required: 425

No of Rooms Required: 1 ea.

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring Tile

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC NR

Plumbing NR

Electrical
One duplex receptacle per vending machine. Additional general purpose receptacles.

Communications
No requirements

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

NR

Equipment and Type

Space for 4 vending machines minimum.

Remarks

Vending machines N.I.C.

Lighting level: 30 footcandles

Room Requirements

Department: Staff Office

Room Name: Staff Lounge

G24

Relationships

Primary

Close to restrooms, office areas

Secondary

NR

Programming

Occupants ---

Room Dimensions

Sq Ft Required: 225 ea.

No of Rooms Required: 2

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC

Plumbing

Electrical

One duplex receptacle per wall minimum including one for refrigerator. One dedicated receptacle for microwave.

Communications

Two dual jack outlets

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for 2 tables, 8 chairs

Equipment and Type

Bulletin Board 36" x 60"

Kitchen cabinet & storage w/ space for microwave.

Space for refrigerator

Remarks

Lighting: 30 footcandles

Room Requirements

Department: Ed Div

Room Name: Classrooms

G25 - 28

Relationships

Primary

In general classroom area

Secondary

Access to G3 classroom area

Programming

Occupants 30 students

Room Dimensions

Sq Ft Required: 900

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 2200

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	Dead Bolt Locks
Windows	Insulated Single or Double-Hung
Acoustics	NR

Engineering

HVAC NR

Plumbing NR

Electrical

Duplex receptacle above ceiling for future ceiling mounted projector. Three duplex receptacles in front of room - one near right corner (facing front of room), one centered, and one adjacent to TV mounting bracket.

Communications

Dual jack outlet located near corner duplex receptacle. Dual jack (one for satellite and one for CATV) TV outlet adjacent to TV mounting bracket.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for 1 table & chair for instructor
Space for 30 **(Am #008) student tables**, lecture stand

Provide 20 s.f. min. storage closet in back of room and a small kitchenette w/ sink in each classroom.

Equipment and Type

Dry erase marker board min. 42" x 60"
Large projection screen min. 48" x 72"

Remarks

Lighting: 50 footcandles with dimmer control.

Provide proper structural support and mounting bracket in ceiling for future multi media projector to be provided by others. In addition, provide all necessary conduit (with pull wire) and j-boxes to allow for future installation of wiring between projector and a CPU to be located in front corner of room.

Provide mounting bracket on wall near ceiling to the right of projection screen to accommodate a 27 inch TV and a separate VCR.

Room Requirements

Department: Ed Div

Room Name: Computer Lab

G29 - 30

Relationships

Primary

In general classroom area

Secondary

Access to G3 classroom area

Programming

Occupants 20 students + one instructor

Room Dimensions

Sq Ft Required: 700

No of Rooms Required: 1 ea

Time and Days of Operation: M – S 0800 - 2200

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	Insulated Single or Double-Hung
Acoustics	NR

Engineering

HVAC
To support CPU's

Plumbing

Electrical
21 recessed floor boxes containing a duplex receptacle and two 8-pin modular jacks for CPU's. Coordinate locations with furniture layout. In addition, one duplex receptacle per wall.

Communications
In addition to above, two dual jack outlets for printers.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for **(Am #008) 20 student tables** & chairs, instructor's table w/ chair, locking cabinets & shelves for supply, chemical storage or provide a min. 20 s.f. storage closet.

Equipment and Type

Dry erase marker board min. 48" x 72"
Space for 20 CPU's for students and 1 for instructor

Space for printer, projection screen same as E14

Remarks

Lighting: 50 footcandles with dimmer control

Room Requirements

Department: Library

Room Name: Entrance & Lobby Area

L1

Relationships

Primary

Access to other lobby areas in Ed Ctr

Secondary

Programming

Occupants

Room Dimensions 10 x 16 approx.

Sq Ft Required: 150

No of Rooms Required: NR

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring Tile

Ceiling ACT

Walls CMU or Drywall

Doors NR

Windows NR

Acoustics Ambient PNC 50 DB (90)

Engineering

HVAC Per Code

Plumbing NR

Electrical
Duplex receptacle(s). Public address speaker.

Communications

Single jack outlet for pay phone.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Provide built-in display glass case.

Equipment and Type

Drinking Fountains (may be located in restrooms area).

Remarks

Must be located adjacent to circulation desk area. Must be accessible to public rest rooms.

Handicapped accessible.

High traffic area.

Convenient to parking area.

Lighting: 10 footcandles. Additional lighting for display case.

Provide an after-hours book drop on outside wall.

Room Requirements

Department: Library

Room Name: Shipping & Receiving

L2

Relationships

Primary

 Adjacent to Technical Services
& Loading Dock

Secondary

Programming

Occupants

Room Dimensions 15 x 20 approx.

Sq Ft Required: 250

No of Rooms Required: 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring	Tile
Ceiling	NR
Walls	Drywall
Doors	NR
Windows	NR
Acoustics	Ambient PNC 40 DB (85)

Engineering

HVAC	Per Code
Plumbing	NR
Electrical	Duplex receptacle(s)
Communications	No voice or data jack requirements.
Fire Alarm System	Per NFPA and ADA

Furnishings

Furniture

Provide min. 12 linear ft. of book storage bins and cabinets on one wall.

Provide min. 10 linear ft. of shelves 6 ft. high for sorting.

Equipment and Type

Remarks

Shipping and receiving area is required for delivery of boxes, equipment, supplies, etc. It is used for storage unpacking, and transporting items.

MAIL BAGS WEIGHING 150LBS.

LOADING DOCK REQUIREMENTS.

Provide door bell buzzer. Buzzer control shall be located on outside wall in docking area. Buzzer shall ring in Technical Services and Librarian's Office.

Lighting: 60 footcandles

Room Requirements

Department: Library

Room Name: Circulation Desk / Control Area

L3

Relationships

Primary

Next to lobby/entry area

Secondary

Programming

Occupants 6-person workstation

Room Dimensions 20 x 25 approx.

Sq Ft Required: 400

No of Rooms Required: NR

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors ---

Windows Yes, UAVB

Acoustics PNC 35 DB (80)

Engineering

HVAC Per Code

Plumbing NR

Electrical

Recessed floor duplex receptacles for 6 CPU's located on circulation desk and 20 online public access catalog CPU's located throughout control area. Some of the access catalog CPU's may be powered from wall receptacles. Also, general use duplex receptacles located throughout space.

Communications

Dual jack outlet in same recessed floor box as CPU receptacles. One recessed floor TV outlet at circulation desk.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Circulation desk

Provide adequate amount of 13 inches deep single faced shelving units

Space for 15 book trucks.

Equipment and Type

Space for 6 CPU's located on control desk

Space for 20 online public access catalog CPU's (may be located throughout the stack areas)

Space for 1 Copier

Remarks

All customers using the library must pass through this area. Customers checking in and out materials. This is also a work area for simple repairs, processing overdue books, and receiving books that are being returned.

Provide public address system control at circulation desk.

Lighting: 60 footcandles

Room Requirements

Department: Library

Room Name: Staff Lounge and Kitchen

L4

Relationships

Primary

Near librarian's office

Secondary

Near Tech Services area

Programming

Occupants

Room Dimensions 15 x 17 approx.

Sq Ft Required: 250

No of Rooms Required: 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics Ambient PNC 50 DB (90)

Engineering

HVAC

Per Code

Plumbing

NR

Electrical

General purpose duplex receptacles, and receptacles for stove and vending machines.

Communications

One dual jack outlet

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for sofas, lounge chairs, chairs and tables.

Provide a unit kitchen with counter & storage cabinets, and space for stove & microwave.

Equipment and Type

Space for 2 vending machines

Remarks

Staff lounge area should be provided for breaks, eating, relaxation, and staff meetings.

The staff lounge should be located close to the technical services, administrative and circulation desk areas.

Lighting: 60 footcandles

Room Requirements

Department: Library

Room Name: Librarian's Office

L5

Relationships

Primary

Near Control Area

Secondary

Near Tech Services

Programming

Occupants 1

Room Dimensions 12.5 x 16 approx.

Sq Ft Required: 200

No of Rooms Required: 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors 2 or 3

Windows Yes, UAVB, draperies

Acoustics Ambient PNC 50, DB (80)

Engineering

HVAC Per Code

Plumbing NR

Electrical
Duplex receptacles matching furniture layout plus general purpose receptacles.

Communications
Four dual jack outlets minimum. Coordinate with furniture layout. Two dual jack (for satellite and CATV) TV outlets.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for desk, chair, credenza & library shelves.

Space for Computer Furniture & Small Conference Table with 4 Chairs

Equipment and Type

Space for 1 Computer.

Remarks

Librarian's office required for library consultation, staff counseling, short meetings with vendors, etc. Sound isolation for confidential conversation between visitors. Adjacent to staff toilet (L20).

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ARMY LIBRARIES AR 415-20, TM 5-800.3

Provide public address system control.

Provide doorbell buzzer. Buzzer activated from loading lock.

Lighting: 60 footcandles

Room Requirements

Department: Library

Room Name: Stack Area

L6

Relationships

Primary

Central location, visible from control area

Secondary

Access from all reading areas

Programming

Occupants 70

Room Dimensions

Sq Ft Required: 3,500

No of Rooms Required: 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	NR
Acoustics	Ambient PNC 50 DB (90)

Engineering

HVAC Per Code

Plumbing NR

Electrical

Some of the floor mounted receptacles for the online public access catalog CPU's may be located in this area.

Communications

Dual jack outlets if recessed electrical outlets provided.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Provide maximum amount of 11 inches deep shelving, double-faced units for large books.

Provide one 60 inches wide unit for flat newspapers.

Space for Tables / chairs

Space for Working Desk

Equipment and Type

Space for online public access CPU's depending on proposer's design.

Remarks

Over 100,000 books, videos, tapes, other library materials. Shelving is non-fiction and fiction. 42 inches wide between shelves per ADA. Book trucks must be able to go between shelves down the aisles.

Must be visible from circulation desk. Extremely well lighted area.

Lighting: 60 footcandles. Do not locate fixtures over shelving.

Library & Ed Cntr, Fort Polk, LA

Room Requirements

Department: Library

Room Name: Children's Room

L7

Relationships

Primary

Next to control area

Secondary

NR

Programming

Occupants 50 persons

Room Dimensions

Sq Ft Required: 1000

No of Rooms Required: 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	NR
Acoustics	Ambient PNC 40 DB (90)

Engineering

HVAC	Per Code
Plumbing	NR
Electrical	Duplex receptacles for CPU's.
Communications	Dual jack outlet for each CPU.
Fire Alarm System	Per NFPA and ADA

Furnishings

Furniture

Provide maximum amount of 11 inches deep capacity shelving, double faced units for magazines & videos.

Space for tables & chairs for 50 children.

Provide two display shelves 20" x 40".

Equipment and Type

Space for 5 CPU's

Remarks

Lighting: 60 footcandles

Room Requirements

Department: Library

Room Name: Technical Services

L8

Relationships

Primary

Next to shipping & receiving

Secondary

Near control area & librarian

Programming

Occupants 10

Room Dimensions

Sq Ft Required: 2100

No of Rooms Required: 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	NR
Acoustics	Ambient PNC 45 DB (80)

Engineering

HVAC Per Code

Plumbing Wash Basin

Electrical

General purpose duplex receptacles in addition to those adjacent to communication outlets.

Communications

Nine dual jack outlets. Provide five based on furniture layout and four as stated in remarks. One CATV outlet.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Provide 12 steel shelves double-faced units 48 inches wide by 5 inches deep.
Space for 20 book trucks, 5 work tables, 5 desks, 5 book cabinets, drafting table, supply cabinet & file cabinets.

Provide a work counter including sink.

Space for computer furniture & storage cabinets.

Equipment and Type

Space for 6 CPU's

Remarks

Technical Service is workplace of the library. Activities are ordering books, videos, etc.
Processing new materials and out going materials, physically and binding, cataloging, and computer repair. The technical services staff requires washbasins, basins.

Lighting: 60 footcandles

Four of the communications outlets shall be located in a 100 Sq Ft portion of the room designated as a LAN server area. Locate two in wall and two in floor 10 feet from wall.

Room Requirements

Department: Library

Room Name: Military Reading Room

L9

Relationships

Primary

NR

Secondary

NR

Programming

Occupants 15

Room Dimensions
Sq Ft Required: 750

No of Rooms Required: 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	UAVB
Acoustics	Ambient 45, DB 90

Engineering

HVAC Per Code

Plumbing NR

Electrical
General purpose duplex receptacle(s) in addition to those located next to communication outlets.

Communications
Five dual jack outlets for CPU's.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for sofa, lounge seating, tables, 10 inches wide double-faced steel shelves, display case, magazine shelves, video shelves, computer furniture

Equipment and Type

Space for five CPU's

Remarks

Specifically dedicated to Military Books, Periodicals, Newspapers, etc. needed for Military Research.

Military Reading Room is also used as a small museum dedicated to Ft. Polk's history.

Lighting: 75 footcandles

Room Requirements

Department: Library

Room Name: Periodical Room

L10

Relationships

Primary

Near control area

Secondary

NR

Programming

Occupants 30 persons

Room Dimensions
Sq Ft Required: 600

No of Rooms Required: 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	NR
Acoustics	Ambient PNC 50 DB (90)

Engineering

HVAC Per Code

Plumbing NR

Electrical
General purpose duplex receptacles.

Communications
No voice or data jack requirements.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Provide the following in the amount allowed by design guide:

 Periodical Shelves
 Newspaper Racks
 Reader Printers
 Microfilm Storage

Space for Sofa / Lounge Chairs, Tables

Equipment and Type

Display Shelves, 20" x 40"

Remarks

Periodicals area should be visible from the circulation desk. Shelving for current issues of periodicals up to one year old. Older issues are maintained in the back issues of storage periodical area.

600 newspapers and magazines.

Lighting: 60 footcandles. Do not place lighting fixtures over shelves.

Room Requirements

Department: Library**Room Name:** Reference Area**L11**

Relationships

Primary

Near control area

Secondary

NR

Programming

Occupants 20**Room Dimensions****Sq Ft Required:** 1000**No of Rooms Required:** 1**Time and Days of Operation:** 7 days, 0800 - 2000**Existing Area**

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	NR
Acoustics	Ambient PNC 40 DB (85)

Engineering

HVAC Per Code**Plumbing** NR**Electrical**
Duplex receptacles for CPU's and general purpose.**Communications**
Twelve dual jack outlets for CPU's**Fire Alarm System**
Per NFPA and ADA

Furnishings

Furniture

Provide maximum amount of 15 inches deep shelving. Space for index table.

Space for Seating tables and chairs, lounge seating, computer furniture, map case, atlas case, dictionary stand, globe stand, 12 study carrels.

Equipment and Type

Space for 12 CPU's

Remarks

Reference materials are non-circulating and are used immediately. Reference books tend to be large and heavy, therefore, tables should be 4 feet wide and 3 linear feet per person in length. Desk is needed for reference librarian. Reference room needs to be near circulation area, so that staff can help customers when librarian is not available.

Lighting: 60 footcandles

Room Requirements

Department: Library

Room Name: Reading / Study Areas

L12

Relationships

Primary

Accessible to/from stack areas

Secondary

Programming

Occupants 30

Room Dimensions
Sq Ft Required: 1,500

No of Rooms Required: 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	NR
Acoustics	Ambient PNC 40 DB (90)

Engineering

HVAC Per Code

Plumbing NR

Electrical
 Recessed floor and wall duplex receptacles for CPU's. Coordinate location with furniture layout. Also, general purpose receptacles.

Communications
 Ten dual jack outlets coordinated with furniture layout.

Fire Alarm System
 Per NFPA and ADA

Furnishings

Furniture

Space for 30 Rectangular Tables / Chairs, lounge seating.

Space for 15 study carrels, end tables, display area for books.

Equipment and Type

Space for 10 CPU's. CPU's will be on tables both against the wall and in middle of room.

Remarks

Reading area and study area needed for research, homework assignments, and casual reading.

Lighting: 75 footcandles

Room Requirements

Department: Library

Room Name: Storage Room

L13

Relationships

Primary

Next to Tech Services area

Secondary

Near stack areas

Programming

Occupants ---

Room Dimensions

Sq Ft Required: 1,000

No of Rooms Required: 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	NR
Acoustics	Ambient PNC 40 DB (90)

Engineering

HVAC Per Code

Plumbing NR

Electrical
Three duplex receptacles minimum. Two for CPU's.

Communications
Two dual jack outlets for CPU's.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Shelving double-faced units 11 deep capacity for large books, 60" wide for flat newspapers.

Space for maximum amount of Tables / chairs, Working Desk

Equipment and Type

Space for 2 CPU's used for inventory

Remarks

DG1110-3-110 ARMY CORPS OF ENGINEERS
DESIGN FOR ARMY LIBRARIES.

Lighting: 50 footcandles

Room Requirements

Department: Library

Room Name: Multi-Media

L14

Relationships

Primary

Near Tech Services & Storage areas

Secondary

Programming

Occupants 22

Room Dimensions
Sq Ft Required: 1,100

No of Rooms Required: 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	NR
Acoustics	Ambient PNC 40 DB (90)

Engineering

HVAC Per Code

Plumbing NR

Electrical

Wall mounted and recessed floor mounted duplex receptacles as required based on furniture and equipment layout. In addition, all other power required for equipment or furniture.

Communications

Wall mounted and recessed floor mounted dual jack outlets and TV outlets as required based on furniture and equipment layout.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for Listening Booths (3 min.), computer furniture, chairs, shelves, storage closets, 3 desks, TV tables and chairs.

Equipment and Type

Space for min. 22 CPU's and 4 printers, 10 CD Players & Video / DVD & 1 Copier.

Remarks

DG 1110-3-110 DESIGN GUIDE FOR ARMY LIBRARIES

Lighting: 50 footcandles with dimming capability.

Room Requirements

Department: Library

Room Name: Telecommunications Closet

L15

Relationships

Primary

Near service areas

Secondary

NR

Programming

Occupants ---

Room Dimensions

Sq Ft Required: (Am #0008) As needed to meet requirements of Chapter D7 Telecommunications, but no smaller than 10' x 10'.

No of Rooms Required: (Am #0008) 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring CPT or Concrete

Ceiling ACT

Walls Drywall

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC See remarks

Plumbing NR

Electrical
Same as room E4.

Communications
Same as room E4.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Equipment and Type

Remarks

Lighting: 50 footcandles

Room temperature shall be conditioned utilizing a mechanical system that is independent of the facility's central HVAC system. A thermostat inside the room shall control the temperature.

(Am #0008) Sentence deleted.

Room Requirements

Department: Library**Room Name:** Restrooms**L16 - 17**

Relationships

Primary

Next to entry lobby

Secondary

NR

Programming

Occupants ---**Room Dimensions****Sq Ft Required:** 350**No of Rooms Required:** 1**Time and Days of Operation:** 7 days, 0800 - 2000**Existing Area**

Architecture

Flooring Tile**Ceiling** ACT or Drywall**Walls** Tile**Doors** NR**Windows** NR**Acoustics** Ambient PNC 35 DB (35)

Engineering

HVAC Per Code**Plumbing** Per Code**Electrical**
One GFCI receptacle for every two sinks (one minimum).**Communications**

No voice or data jack requirements.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Diaper Layette

Utility Closet

Equipment and Type

Provide number of fixtures as required for population.

Remarks

HANDICAPPED ACCESSIBLE

Lighting: 20 footcandles with additional lighting over mirrors.

Room Requirements

Department: Library**Room Name:** Mechanical**L18**

Relationships

Primary

NR

Secondary

NR

Programming

Occupants ---**Room Dimensions****Sq Ft Required:** 255**No of Rooms Required:** 1**Time and Days of Operation:** 7 days, 0800 - 2000**Existing Area**

Architecture

Flooring Concrete**Ceiling** NR**Walls** CMU**Doors** NR**Windows** NR**Acoustics** NR

Engineering

HVAC Per Code**Plumbing** NR**Electrical**

One duplex receptacle per wall.

Communications

One voice jack near door.

Fire Alarm System

One combination audible/visual device and one manual pull station adjacent to exterior door. Fire alarm panel and transmitter.

Furnishings

Furniture**Equipment and Type**

Remarks

Lighting: 15 footcandles

Provide only one fire alarm panel and one transmitter for facility. Fire alarm panel may be provided in other mechanical room if designer so chooses.

Provide a separate electrical closet/room as required.

Room Requirements

Department: Library

Room Name: Janitorial / Storage Supply Room

L19

Relationships

Primary

NR

Secondary

NR

Programming

Occupants ---

Room Dimensions

Sq Ft Required: 50

No of Rooms Required: 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring Concrete

Ceiling Drywall

Walls Tile

Doors NR

Windows NR

Acoustics NR

Engineering

HVAC Per Code

Plumbing NR

Electrical
One duplex receptacle

Communications
No requirements including public address.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Provide sink & storage shelving.

Equipment and Type

Remarks

For storage of cleaning supplies, and equipment of library..

Lighting: 15 footcandles

Room Requirements

Department: Library**Room Name:** Staff Toilet & Lockers (see remarks)**L20**

Relationships

Primary

Near staff areas

Secondary

NR

Programming

Occupants ---**Room Dimensions****Sq Ft Required:** 100**No of Rooms Required:** 1**Time and Days of Operation:** 7 days, 0800 - 2000**Existing Area**

Architecture

Flooring Tile**Ceiling** ACT**Walls** Tile**Doors** NR**Windows** NR**Acoustics** NR

Engineering

HVAC Per Code**Plumbing** NR**Electrical**

One GFCI receptacle for every sink (minimum of one)

Communications

No voice or data jack requirements.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture**Equipment and Type**

Remarks

This will be a "unisex" toilet. Provide min. 12 lockers for staff members. Lockers can be double tiered.

Lighting: 20 footcandles with additional lighting above mirrors.

Room Requirements

Department: Library

Room Name: Library Technicians

L21

Relationships

Primary

Adjacent to librarian's Office & Control Area

Secondary

NR

Programming

Occupants ---

Room Dimensions
Sq Ft Required: 250

No of Rooms Required: 1

Time and Days of Operation: 7 days, 0800 - 2000

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	NR
Acoustics	Ambient PNC 50, DB (80)

Engineering

HVAC Per Code

Plumbing NR

Electrical

Duplex receptacles matching furniture layout plus general purpose receptacles.

Communications

Four dual jack outlets minimum. Coordinate with furniture layout. Two dual jack (for satellite and CATV) TV outlets.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for 2 desks, chairs, & book shelves.

Equipment and Type

Space for 1 Typewriter, Printer, Fax Machine, Copier, TV / Video / DVD.

Remarks

Lighting: 60 footcandles

Room Requirements

Department: ALC

Room Name: Office

M1

Relationships

Primary

MOS Library

Secondary

NR

Programming

Occupants 3

Room Dimensions

Sq Ft Required: 200

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	Insulated Single or Double-Hung
Acoustics	NR

Furnishings

Furniture

Space for 3 desks, chairs, 3 guest chairs,
6 file cabinets (6 drawer) & 1 worktable

Equipment and Type

Space for CPU at each desk
Space for fax machine

Engineering

HVAC Per Code

Plumbing N/R

Electrical
Five wall mounted duplex receptacles coordinated
with furniture layout.

Communications
Four dual jack outlets. Coordinate with desk locations
and fax machine location.

Fire Alarm System
Per NFPA and ADA

Remarks

Shared office space, one desk is reception. **(Am #008)**
Provide a walkup counter to reception area from hallway.

Lighting: 50 footcandles

Room Requirements

Department: ALC

Room Name: Self-Paced Instruction

M2

Relationships

Primary

Next to M3

Secondary

Programming

Occupants

6

Room Dimensions

Sq Ft Required: 300

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors Dead Bolt Locks, Secure Doors

Windows NR

Acoustics NR

Engineering

HVAC

To support all CPU's

Plumbing

Electrical

Duplex receptacles

Communications

Four dual jack outlets minimum.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for 6 tables & chairs w/ work space, 1 printer stand, & 1 admin desk / office within space.

Equipment and Type

Space for 6 CPU's

Remarks

Lighting: 50 footcandles

* Opens into M3

Room Requirements

Department: ALC

Room Name: MOS Reading Room

M3

Relationships

Primary

Next to M2

Secondary

Close to M1, M5-7

Programming

Occupants 10

Room Dimensions

Sq Ft Required: 1000

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors Dead Bolt Locks

Windows NR

Acoustics NR

Engineering

HVAC

Plumbing

Electrical

Duplex receptacles. Coordinate locations with equipment layout.

Communications

Two dual jack outlets minimum. Coordinate locations with furniture layout.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Maximize shelving for books, videos, pamphlets, CD's, & books (access by staff only).

Equipment and Type

Space for copier, microfiche & printer

Space for CPU

Remarks

Need reception desk area

?? Opens into M2

Lighting: 50 footcandles

Room Requirements

Department: ALC

Room Name: PLATO Computer Lab

M4

Relationships

Primary

In general classroom area

Secondary

Access to G3 classroom area

Programming

Occupants 20

Room Dimensions

Sq Ft Required: 900

No of Rooms Required: 1

Time and Days of Operation: M – F 0800 - 1630

Existing Area

Architecture

Flooring	CPT
Ceiling	ACT
Walls	Drywall
Doors	NR
Windows	Insulated Single or Double-Hung
Acoustics	NR

Engineering

HVAC To support CPU's

Plumbing

Electrical

21 recessed floor boxes containing a duplex receptacle and two 8-pin modular jacks for CPU's. Coordinate locations with furniture layout. In addition, one duplex receptacle per wall.

Communications

In addition to above, two dual jack outlets for printers.

Fire Alarm System

Per NFPA and ADA

Furnishings

Furniture

Space for **(Am #008) tables** & chairs for 20 students, plus instructor's table w/ chair.

Equipment and Type

Space for 20 CPU's for students and one for instructor

Space for 1 Printer

Dry erase marker board min. 42" x 60"
Large projection screen min. 48" x 72"

Remarks

Lighting: 50 footcandles with dimmer control

Room Requirements

Department: ALC

Room Name: Self-Study

M5 - 7

Relationships

Primary

Next to M1

Secondary

Near M2, M3

Programming

Occupants One person ea.

Room Dimensions

Sq Ft Required: 67

No of Rooms Required: 3

Time and Days of Operation: M – F 0800 - 1700

Existing Area

Architecture

Flooring CPT

Ceiling ACT

Walls Drywall

Doors N/R

Windows N/R

Acoustics N/R

Engineering

HVAC Per Code

Plumbing N/R

Electrical
Duplex receptacles

Communications
One dual jack outlet and one TV jack.

Fire Alarm System
Per NFPA and ADA

Furnishings

Furniture

Space for table & chair or built-in counter.

Equipment and Type

Space for VCR / TV in ea. room
Space for CPU in ea. room
Space for 1 typewriter in one room only

Remarks

Lighting: 50 footcandles